STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 117413

TO: Jezia Riley
Location: REM.2A31/2C18
Art Unit: 1637
Wednesday, March 31, 2004

Case Serial Number: 10/070340

From: Barb O'Bryen
Location: Biotech-Chem Library
Remsen 1A69
Phone: 571-272-2518

barbara.obryen@uspto.gov

Search Notes

```
=> fil reg; d stat que l68
FILE 'REGISTRY' ENTERED AT 14:41:30 ON 31 MAR 2004
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   30 MAR 2004  HIGHEST RN 669048-54-8
DICTIONARY FILE UPDATES:  30 MAR 2004  HIGHEST RN 669048-54-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html


L13             STR
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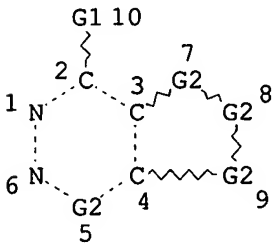


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VAR G1=H/X/O/S/C/N
VAR G2=C/N
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  10

STEREO ATTRIBUTES: NONE
L15         2820 SEA FILE=REGISTRY SSS FUL L13
L16       690580 SEA FILE=REGISTRY ABB=ON  (C4N2 OR C3N3)/EAS AND (C4N OR C3N2
                 OR C2N3)/EAS
L17         2639 SEA FILE=REGISTRY ABB=ON  L16 AND L15
L66              STR
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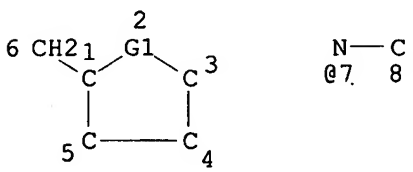


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NODE ATTRIBUTES:
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE
L68 208 SEA FILE=REGISTRY SUB=L17 SSS FUL L66

100.0% PROCESSED 209 ITERATIONS 208 ANSWERS
SEARCH TIME: 00.00.01

=> fil capl; d que nos 120; d que nos 128; d que nos 126; d que nos 135; d que nos 175; d que nos 180; d que nos 178

FILE 'CAPLUS' ENTERED AT 14:41:31 ON 31 MAR 2004
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FILE COVERS 1907 - 31 Mar 2004 VOL 140 ISS 14
FILE LAST UPDATED: 30 Mar 2004 (20040330/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

L13 STR
L15 2820 SEA FILE=REGISTRY SSS FUL L13
L16 690580 SEA FILE=REGISTRY ABB=ON (C4N2 OR C3N3)/EAS AND (C4N OR C3N2 OR C2N3)/EAS
L17 2639 SEA FILE=REGISTRY ABB=ON L16 AND L15
L18 584 SEA FILE=CAPLUS ABB=ON L17
L19 47620 SEA FILE=CAPLUS ABB=ON HYBRIDI?/OBI
L20 5 SEA FILE=CAPLUS ABB=ON L18 AND L19

L13 STR
L15 2820 SEA FILE=REGISTRY SSS FUL L13
L16 690580 SEA FILE=REGISTRY ABB=ON (C4N2 OR C3N3)/EAS AND (C4N OR C3N2 OR C2N3)/EAS
L17 2639 SEA FILE=REGISTRY ABB=ON L16 AND L15
L18 584 SEA FILE=CAPLUS ABB=ON L17
L27 45858 SEA FILE=CAPLUS ABB=ON (PAIR?(5A)BASE#)/BI
L28 6 SEA FILE=CAPLUS ABB=ON L27 AND L18

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L13             STR
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L16      690580 SEA FILE=REGISTRY ABB=ON  (C4N2 OR C3N3)/EAS AND (C4N OR C3N2
               OR C2N3)/EAS
L17        2639 SEA FILE=REGISTRY ABB=ON  L16 AND L15
L18         584 SEA FILE=CAPLUS ABB=ON  L17
L25      121153 SEA FILE=CAPLUS ABB=ON  PROBE#/OBI OR PRIMER#/OBI
L26           4 SEA FILE=CAPLUS ABB=ON  L18 AND L25


L13             STR
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L16      690580 SEA FILE=REGISTRY ABB=ON  (C4N2 OR C3N3)/EAS AND (C4N OR C3N2
               OR C2N3)/EAS
L17        2639 SEA FILE=REGISTRY ABB=ON  L16 AND L15
L18         584 SEA FILE=CAPLUS ABB=ON  L17
L33      332208 SEA FILE=CAPLUS ABB=ON  POLYMERIZ?/OBI
L34       48885 SEA FILE=CAPLUS ABB=ON  POLYMERASE CHAIN/OBI
L35           4 SEA FILE=CAPLUS ABB=ON  L18 AND (L33 OR L34)


L13             STR
L15        2820 SEA FILE=REGISTRY SSS FUL L13
L16      690580 SEA FILE=REGISTRY ABB=ON  (C4N2 OR C3N3)/EAS AND (C4N OR C3N2
               OR C2N3)/EAS
L17        2639 SEA FILE=REGISTRY ABB=ON  L16 AND L15
L62       76723 SEA FILE=CAPLUS ABB=ON  COMPLEMENT?/OBI
L66             STR
L68         208 SEA FILE=REGISTRY SUB=L17 SSS FUL L66
L69          97 SEA FILE=CAPLUS ABB=ON  L68
L74       15261 SEA FILE=CAPLUS ABB=ON  COMPLEMENT/CT
L75           2 SEA FILE=CAPLUS ABB=ON  L62 AND L69 NOT L74


L13             STR
L15        2820 SEA FILE=REGISTRY SSS FUL L13
L16      690580 SEA FILE=REGISTRY ABB=ON  (C4N2 OR C3N3)/EAS AND (C4N OR C3N2
               OR C2N3)/EAS
L17        2639 SEA FILE=REGISTRY ABB=ON  L16 AND L15
L61      100311 SEA FILE=CAPLUS ABB=ON  SOLID PHASE#/OBI OR IMMOBILI?/OBI
L66             STR
L68         208 SEA FILE=REGISTRY SUB=L17 SSS FUL L66
L69          97 SEA FILE=CAPLUS ABB=ON  L68
L80           3 SEA FILE=CAPLUS ABB=ON  L69 AND L61


L13             STR
L15        2820 SEA FILE=REGISTRY SSS FUL L13
L16      690580 SEA FILE=REGISTRY ABB=ON  (C4N2 OR C3N3)/EAS AND (C4N OR C3N2
               OR C2N3)/EAS
L17        2639 SEA FILE=REGISTRY ABB=ON  L16 AND L15
L59       16866 SEA FILE=CAPLUS ABB=ON  PARALLEL/OBI OR ANTIPARALLEL/OBI
L63        8725 SEA FILE=CAPLUS ABB=ON  REPORTER#/OBI
L66             STR
L68         208 SEA FILE=REGISTRY SUB=L17 SSS FUL L66
L69          97 SEA FILE=CAPLUS ABB=ON  L68
L78           0 SEA FILE=CAPLUS ABB=ON  L69 AND (L59 OR L63)
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=> s l20 or l28 or l26 or l35 or l75 or l80

L97 12 L20 OR L28 OR L26 OR L35 OR L75 OR L80

=> fil toxcenter; d que nos 142;d que nos 193

FILE 'TOXCENTER' ENTERED AT 14:41:33 ON 31 MAR 2004
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FILE COVERS 1907 TO 30 Mar 2004 (20040330/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

TOXCENTER has been enhanced with new files segments and search fields. See HELP CONTENT for more information.

TOXCENTER thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2004 vocabulary. See http://www.nlm.nih.gov/mesh/ and http://www.nlm.nih.gov/pubs/techbull/nd03/nd03_mesh.html for a description of changes.

L13		STR
L15	2820	SEA FILE=REGISTRY SSS FUL L13
L16	690580	SEA FILE=REGISTRY ABB=ON (C4N2 OR C3N3)/EAS AND (C4N OR C3N2 OR C2N3)/EAS
L17	2639	SEA FILE=REGISTRY ABB=ON L16 AND L15
L30	695	SEA FILE=REGISTRY ABB=ON L17 AND TOXCENTER/LC
L36	120	SEA FILE=TOXCENTER ABB=ON L30
L37	36818	SEA FILE=TOXCENTER ABB=ON HYBRIDI?
L38	72992	SEA FILE=TOXCENTER ABB=ON PROBE# OR PRIMER#
L39	14132	SEA FILE=TOXCENTER ABB=ON (PAIR?(5A)BASE#)
L40	9212	SEA FILE=TOXCENTER ABB=ON POLYMERIZ?
L41	44347	SEA FILE=TOXCENTER ABB=ON POLYMERASE CHAIN
L42	5	SEA FILE=TOXCENTER ABB=ON L36 AND (L37 OR L38 OR L39 OR L40 OR L41)

L13		STR
L15	2820	SEA FILE=REGISTRY SSS FUL L13
L16	690580	SEA FILE=REGISTRY ABB=ON (C4N2 OR C3N3)/EAS AND (C4N OR C3N2 OR C2N3)/EAS
L17	2639	SEA FILE=REGISTRY ABB=ON L16 AND L15
L66		STR
L68	208	SEA FILE=REGISTRY SUB=L17 SSS FUL L66
L88	22	SEA FILE=TOXCENTER ABB=ON L68
L89	48661	SEA FILE=TOXCENTER ABB=ON PARALLEL OR ANTIPARALLEL
L90	41904	SEA FILE=TOXCENTER ABB=ON SOLID PHASE OR IMMOBILI?
L91	23135	SEA FILE=TOXCENTER ABB=ON COMPLEMENTARY
L92	16444	SEA FILE=TOXCENTER ABB=ON REPORTER
L93	2	SEA FILE=TOXCENTER ABB=ON L88 AND (L89 OR L90 OR L91 OR L92)

=> s l42 or l93

L98 5 L42 OR L93

=> fil uspatf; d que nos 149; d que nos 186

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FILE 'USPATFULL' ENTERED AT 14:41:34 ON 31 MAR 2004
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FILE COVERS 1971 TO PATENT PUBLICATION DATE: 30 Mar 2004 (20040330/PD)
FILE LAST UPDATED: 30 Mar 2004 (20040330/ED)
HIGHEST GRANTED PATENT NUMBER: US6715148
HIGHEST APPLICATION PUBLICATION NUMBER: US2004060089
CA INDEXING IS CURRENT THROUGH 30 Mar 2004 (20040330/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 30 Mar 2004 (20040330/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2004
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2004

>>>  USPAT2 is now available.  USPATFULL contains full text of the     <<<
>>>  original, i.e., the earliest published granted patents or         <<<
>>>  applications.  USPAT2 contains full text of the latest US         <<<
>>>  publications, starting in 2001, for the inventions covered in     <<<
>>>  USPATFULL.  A USPATFULL record contains not only the original     <<<
>>>  published document but also a list of any subsequent              <<<
>>>  publications.  The publication number, patent kind code, and      <<<
>>>  publication date for all the US publications for an invention     <<<
>>>  are displayed in the PI (Patent Information) field of USPATFULL   <<<
>>>  records and may be searched in standard search fields, e.g., /PN, <<<
>>>  /PK, etc.                                                         <<<

>>>  USPATFULL and USPAT2 can be accessed and searched together        <<<
>>>  through the new cluster USPATALL.  Type FILE USPATALL to          <<<
>>>  enter this cluster.                                               <<<
>>>                                                                    <<<
>>>  Use USPATALL when searching terms such as patent assignees,       <<<
>>>  classifications, or claims, that may potentially change from     <<<
>>>  the earliest to the latest publication.                           <<<

This file contains CAS Registry Numbers for easy and accurate
substance identification.
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L13             STR
L15        2820 SEA FILE=REGISTRY SSS FUL L13
L16      690580 SEA FILE=REGISTRY ABB=ON  (C4N2 OR C3N3)/EAS AND (C4N OR C3N2
               OR C2N3)/EAS
L17        2639 SEA FILE=REGISTRY ABB=ON  L16 AND L15
L31         514 SEA FILE=REGISTRY ABB=ON  L17 AND USPATFULL/LC
L43          51 SEA FILE=USPATFULL ABB=ON  L31
L44       21871 SEA FILE=USPATFULL ABB=ON  HYBRIDI?/IT,TI,AB,CLM
L45       60155 SEA FILE=USPATFULL ABB=ON  (PROBE# OR PRIMER#)/IT,TI,AB,CLM
L46       23876 SEA FILE=USPATFULL ABB=ON  (PAIR?(5A)BASE#)/IT,TI,AB,CLM
L47       73862 SEA FILE=USPATFULL ABB=ON  POLYMERIZ?/IT,TI,AB,CLM
L48        7813 SEA FILE=USPATFULL ABB=ON  (POLYMERASE CHAIN)/IT,TI,AB,CLM
L49           4 SEA FILE=USPATFULL ABB=ON  L43 AND (L44 OR L45 OR L46 OR L47
               OR L48)



L13             STR
L15        2820 SEA FILE=REGISTRY SSS FUL L13
L16      690580 SEA FILE=REGISTRY ABB=ON  (C4N2 OR C3N3)/EAS AND (C4N OR C3N2
               OR C2N3)/EAS
L17        2639 SEA FILE=REGISTRY ABB=ON  L16 AND L15
L66             STR
L68         208 SEA FILE=REGISTRY SUB=L17 SSS FUL L66
L86           3 SEA FILE=USPATFULL ABB=ON  L68
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```
=> s l49 or l86

L99          5 L49 OR L86

=> fil MEDLINE, CANCERLIT, AGRICOLA, DRUGU, IPA, BIOSIS, EMBASE

FILE 'MEDLINE' ENTERED AT 14:41:36 ON 31 MAR 2004

FILE 'CANCERLIT' ENTERED AT 14:41:36 ON 31 MAR 2004

FILE 'AGRICOLA' ENTERED AT 14:41:36 ON 31 MAR 2004

FILE 'DRUGU' ENTERED AT 14:41:36 ON 31 MAR 2004
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=> d que nos l56

L13             STR
L15          2820 SEA FILE=REGISTRY SSS FUL L13
L16        690580 SEA FILE=REGISTRY ABB=ON  (C4N2 OR C3N3)/EAS AND (C4N OR C3N2
                  OR C2N3)/EAS
L17          2639 SEA FILE=REGISTRY ABB=ON  L16 AND L15
L32            19 SEA FILE=REGISTRY ABB=ON  L17 AND (BIOSIS OR MEDLINE OR
                  CANCERLIT OR DRUGU OR IPA OR AGRICOLA OR EMBASE)/LC
L50            64 SEA L32
L51        473269 SEA HYBRIDI?
L52        636314 SEA PROBE# OR PRIMER#
L53        102966 SEA (PAIR?(5A) BASE#)
L54         82637 SEA POLYMERIZ? OR POLYMERIS?
L55        554733 SEA POLYMERASE CHAIN
L56             4 SEA L50 AND (L51 OR L52 OR L53 OR L54 OR L55)


=> fil medl cancer drugu biosis; d que nos l95

FILE 'MEDLINE' ENTERED AT 14:41:38 ON 31 MAR 2004

FILE 'CANCERLIT' ENTERED AT 14:41:38 ON 31 MAR 2004

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FILE 'BIOSIS' ENTERED AT 14:41:38 ON 31 MAR 2004
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L13             STR
L15          2820 SEA FILE=REGISTRY SSS FUL L13
L16        690580 SEA FILE=REGISTRY ABB=ON  (C4N2 OR C3N3)/EAS AND (C4N OR C3N2
                  OR C2N3)/EAS
L17          2639 SEA FILE=REGISTRY ABB=ON  L16 AND L15
L66             STR
L68           208 SEA FILE=REGISTRY SUB=L17 SSS FUL L66
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L95          15 SEA L68


=> dup rem l97,l99,l56,l95,l98
FILE 'CAPLUS' ENTERED AT 14:42:30 ON 31 MAR 2004
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FILE 'USPATFULL' ENTERED AT 14:42:30 ON 31 MAR 2004
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FILE 'MEDLINE' ENTERED AT 14:42:30 ON 31 MAR 2004

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FILE 'CANCERLIT' ENTERED AT 14:42:30 ON 31 MAR 2004

FILE 'DRUGU' ENTERED AT 14:42:30 ON 31 MAR 2004
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FILE 'TOXCENTER' ENTERED AT 14:42:30 ON 31 MAR 2004
COPYRIGHT (C) 2004 ACS
PROCESSING COMPLETED FOR L97
PROCESSING COMPLETED FOR L99
PROCESSING COMPLETED FOR L56
PROCESSING COMPLETED FOR L95
PROCESSING COMPLETED FOR L98
L100         27 DUP REM L97 L99 L56 L95 L98 (14 DUPLICATES REMOVED)
                ANSWERS '1-12' FROM FILE CAPLUS
                ANSWERS '13-16' FROM FILE USPATFULL
                ANSWERS '17-18' FROM FILE MEDLINE
                ANSWERS '19-24' FROM FILE BIOSIS
                ANSWERS '25-27' FROM FILE DRUGU

=> d ibib ed abs hitstr 1-16; d iall 17-27

L100 ANSWER 1 OF 27  CAPLUS  COPYRIGHT 2004 ACS on STN DUPLICATE 1
ACCESSION NUMBER:        2003:472653  CAPLUS
DOCUMENT NUMBER:         139:48120
TITLE:                   Annealing control primer for improving
                         annealing specificity in nucleic acid amplification
                         and its uses
INVENTOR(S):             Chun, Jong-yoon
PATENT ASSIGNEE(S):      Seegene, Inc., S. Korea
SOURCE:                  PCT Int. Appl., 190 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  5
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.   DATE
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     WO 2003050305      A1   20030619      WO 2002-KR1781    20020919
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2003050304 A1 20030619 WO 2001-KR2133 20011208

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2003093509 A1 20031113 WO 2002-KR816 20020501

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: WO 2001-KR2133 A 20011208
WO 2002-KR816 A 20020501

ED Entered STN: 20 Jun 2003

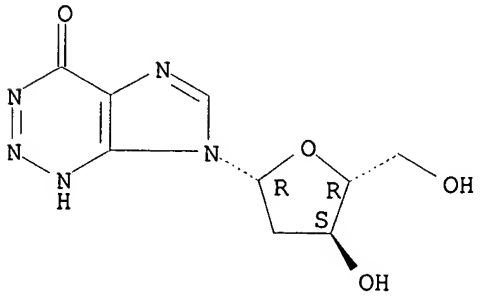
AB The present invention relates to an annealing control primer for improving annealing specificity in nucleic acid amplification and its APPLICATIONS to all fields of nucleic acid amplification-involved technol. The present primer comprises (a) a 3'-end portion having a hybridizing nucleotide sequence substantially complementary to a site on a template nucleic acid to hybridize therewith; (b) a 5'-end portion having a pre-selected arbitrary nucleotide sequence; and (c) a regulator portion positioned between said 3'-end portion and said 5'-end portion comprising at least one universal base or non-discriminatory base analog, whereby said regulator portion is capable of regulating an annealing portion of said primer in assocn. with annealing temp.

IT **56220-50-9**, 2-Aza-2'-deoxyinosine
RL: RGT (Reagent); RACT (Reactant or reagent)
(annealing control **primer** for improving annealing specificity in nucleic acid amplification and its uses)

RN 56220-50-9 CAPLUS

CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

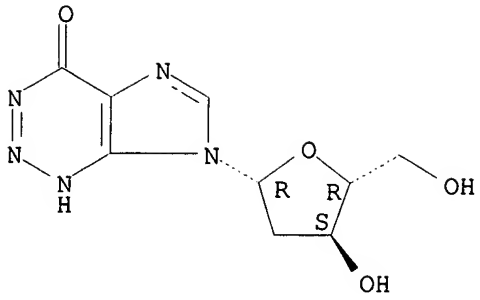
L100 ANSWER 2 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2003:737249 CAPLUS
DOCUMENT NUMBER: 139:257671
TITLE: Oligonucleotide **primers** with improved annealing specificity for nucleic acid amplification
INVENTOR(S): Chun, Jong-yoon
PATENT ASSIGNEE(S): S. Korea
SOURCE: U.S. Pat. Appl. Publ., 93 pp., Cont.-in-part of U.S.Ser. No. 14,496.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003175749	A1	20030918	US 2002-269031	20021011
WO 2003050304	A1	20030619	WO 2001-KR2133	20011208
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003152925	A1	20030814	US 2001-14496	20011214

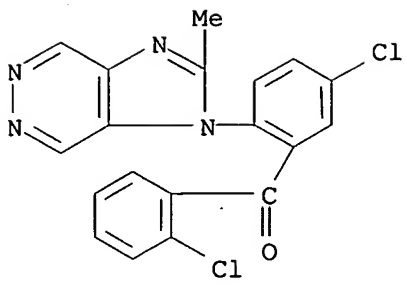
PRIORITY APPLN. INFO.: WO 2001-KR2133 A 20011208
US 2001-14496 A2 20011214

ED Entered STN: 19 Sep 2003
AB The present invention relates to an annealing control primer for improving annealing specificity in nucleic acid amplification and its applications to all fields of nucleic acid amplification-involved technol. The present primer comprises a 3'-end portion having a hybridizing nucleotide sequence substantially complementary to a site on a template nucleic acid to hybridize therewith, a 5'-end portion having a pre-selected arbitrary nucleotide sequence and a regulator portion positioned between said 3'-end portion and said 5'-end portion comprising at least one universal base or non-discriminatory base analog, whereby said regulator portion is capable of regulating an annealing portion of said primer in assocn. with annealing temp.
IT **56220-50-9**, 2-Aza-2'-deoxyinosine
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(as non-discriminatory base; oligonucleotide **primers** with improved annealing specificity for nucleic acid amplification)
RN 56220-50-9 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



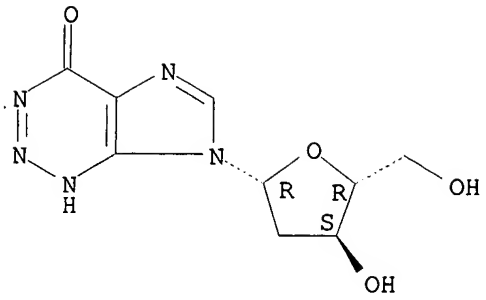
L100 ANSWER 3 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2000:688935 CAPLUS
DOCUMENT NUMBER: 133:344152
TITLE: Hematin **polymerization** assay as a high-throughput screen for identification of new antimalarial pharmacophores
AUTHOR(S): Kurosawa, Yae; Dorn, Arnulf; Kitsuji-Shirane, Michiko; Shimada, Hisao; Satoh, Tomoko; Matile, Hugues; Hofheinz, Werner; Masciadri, Raffaello; Kansy, Manfred; Ridley, Robert G.
CORPORATE SOURCE: Department of Pharmaceutical Screening, Nippon Roche Research Center, Kamakura, 247, Japan
SOURCE: Antimicrobial Agents and Chemotherapy (2000), 44(10), 2638-2644
CODEN: AMACCQ; ISSN: 0066-4804
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 01 Oct 2000
AB Hematin polymn. is a parasite-specific process that enables the detoxification of heme following its release in the lysosomal digestive vacuole during Hb degrdn., and represents both an essential and a unique pharmacol. drug target. We have developed a high-throughput in vitro microassay of hematin polymn. based on the detection of 14C-labeled hematin incorporated into polymeric hemozoin (malaria pigment). The assay uses 96-well filtration microplates and requires 12 h and a Wallac 1450 MicroBeta liq. scintillation counter. The robustness of the assay allowed the rapid screening and evaluation of more than 100,000 compds. Random screening was complemented by the development of a pharmacophore hypothesis using the "Catalyst" program and a large amt. of data available on the inhibitory activity of a large library of 4-aminoquinolines. Using these methods, we identified "hit" compds. belonging to several chem. structural classes that had potential antimalarial activity. Follow-up evaluation of the antimalarial activity of these compds. in culture and in the Plasmodium berghei murine model further identified compds. with actual antimalarial activity. Of particular interest was a triarylcarbinol (Ro 06-9075) and a related benzophenone (Ro 22-8014) that showed oral activity in the murine model. These compds. are chem. accessible and could form the basis of a new antimalarial medicinal chem. program.
IT **306773-26-2**, Ro 22-8014
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(hematin **polymn**. assay as a high-throughput screen for identification of new antimalarial pharmacophores)
RN 306773-26-2 CAPLUS
CN Methanone, [5-chloro-2-(2-methyl-1H-imidazo[4,5-d]pyridazin-1-yl)phenyl](2-chlorophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L100 ANSWER 4 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2000:81722 CAPLUS
DOCUMENT NUMBER: 132:265427
TITLE: 2-Aza-2'-deoxyadenosine: synthesis, **base-pairing** selectivity, and stacking properties of oligonucleotides
AUTHOR(S): Sugiyama, Tamizi; Schweinberger, Enno; Kazimierczuk, Zygmunt; Ramzaeva, Natalya; Rosemeyer, Helmut; Seela, Frank
CORPORATE SOURCE: Laboratorium fur Organische und Bioorganische Chemie Institut fur Chemie, Fachbereich Biologie/Chemie, Universitat Osnabruck, Osnabruck, D-49069, Germany
SOURCE: Chemistry--A European Journal (2000), 6(2), 369-378
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 03 Feb 2000
AB 2-Aza-2'-deoxyadenosine (z2Ad) is synthesized via its 1,N6-etheno deriv. and enzymically deaminated to 2-aza-2'-deoxyinosine. 2-Aza-2'-deoxyadenosine is converted into the phosphoramidite building block. This is employed in solid-phase oligonucleotide synthesis. The 2-azapurine **base** forms a strong **base pair** with guanine, but a much weaker one with adenine, thymine, and cytosine. Oligonucleotide duplexes with dangling nucleotide residues, such as 2-aza-2'-deoxyadenosine and 7-deaza-2'-deoxyadenosine (c7Ad), either on one or both termini, are synthesized, and the thermal stability of the duplexes is correlated with the hydrophobic properties of the dangling nucleotide residues.
IT **56220-50-9P**
RL: BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(synthesis, **base-pairing** selectivity and stacking properties of oligonucleotides incorporating 2-aza-2'-deoxyadenosine)
RN 56220-50-9 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-1,7-dihydro- (9CI) (CA INDEX NAME)

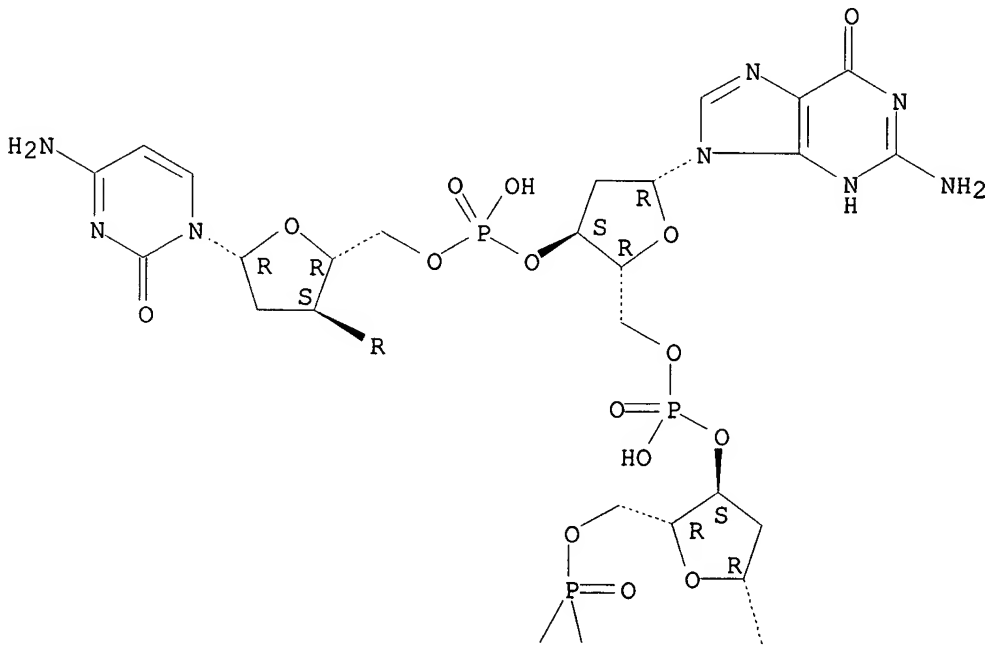
Absolute stereochemistry.



IT **261776-89-0P 261776-93-6P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis, **base-pairing** selectivity and stacking
properties of oligonucleotides incorporating 2-aza-2'-deoxyadenosine)
RN 261776-89-0 CAPLUS
CN Guanosine, 2'-deoxy-2-azaadenylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-
(3'.fwdarw.5')-2'-deoxyguanylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-
(3'.fwdarw.5')-2'-deoxyguanylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-
(3'.fwdarw.5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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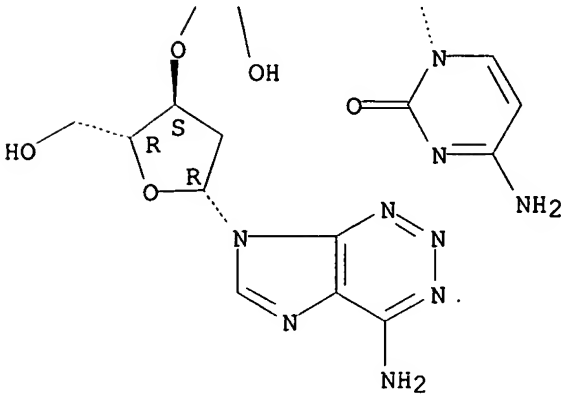

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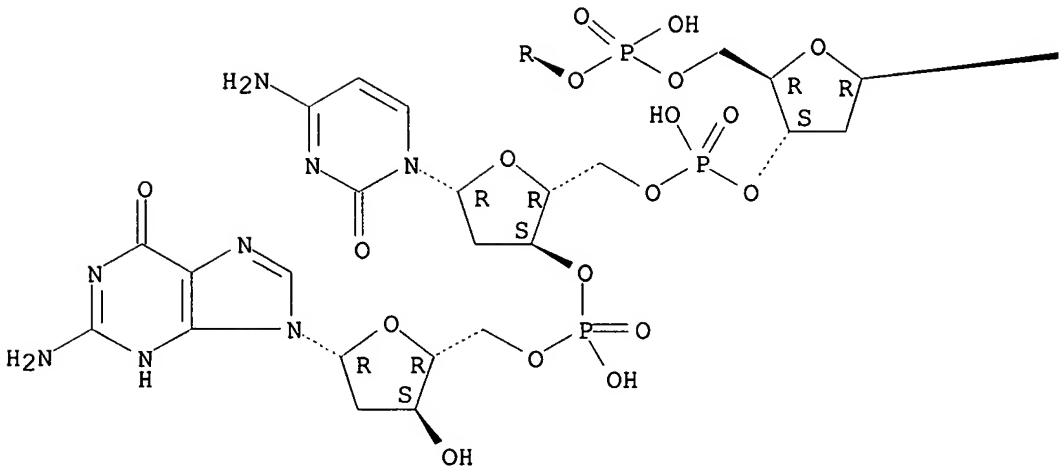

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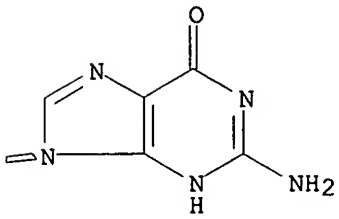


RN 261776-93-6 CAPLUS
CN Guanosine, 2'-deoxy-2-azaadenylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxyguanylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxyguanylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxy-, complex with 2'-deoxyguanylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxyguanylyl-(3'.fwdarw.5')-2'-

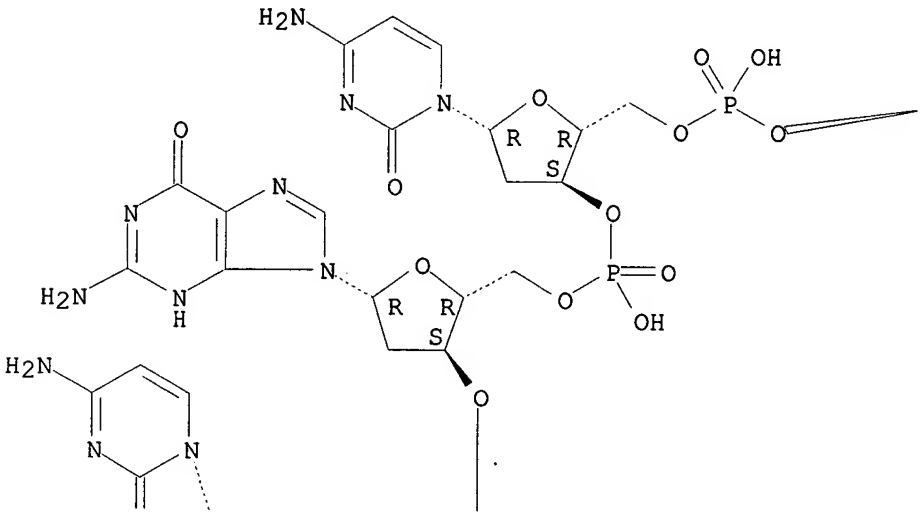
deoxycytidylyl-(3'.fwdarw.5')-2'-deoxyguanylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxy-2-azaadenosine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 261776-92-5
CMF C66 H84 N30 O39 P6

Absolute stereochemistry.

PAGE 1-A



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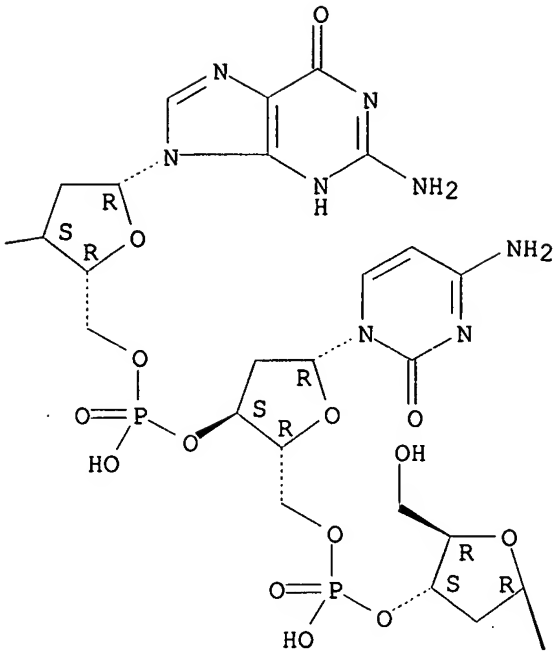

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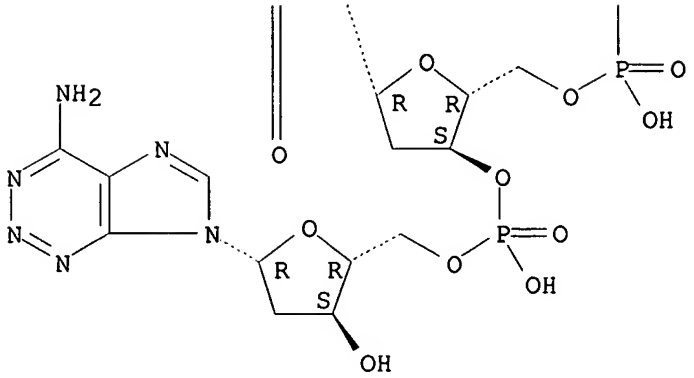

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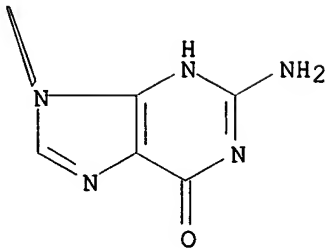
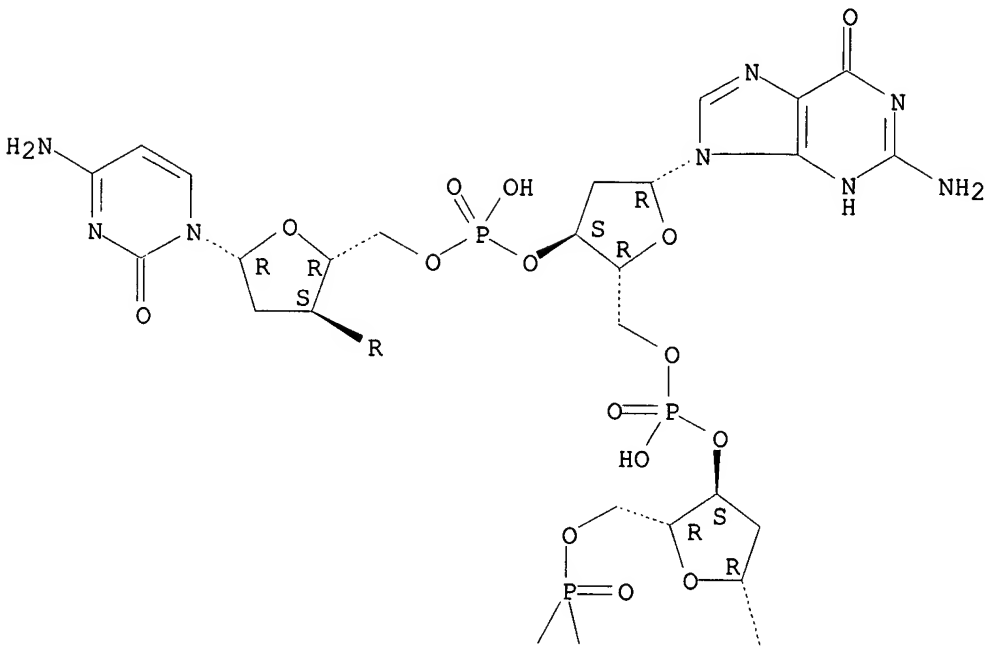


CM 2

CRN 261776-89-0
CMF C66 H84 N30 O39 P6

Absolute stereochemistry.

PAGE 1-A



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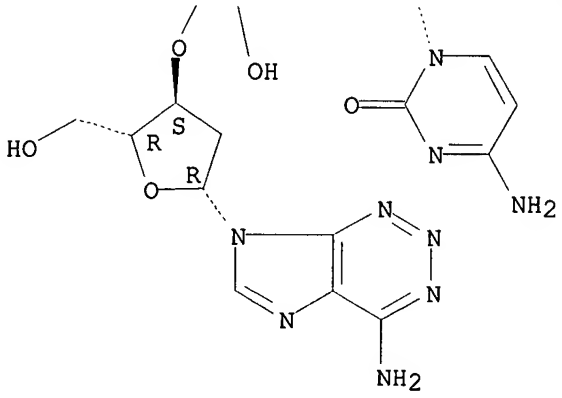

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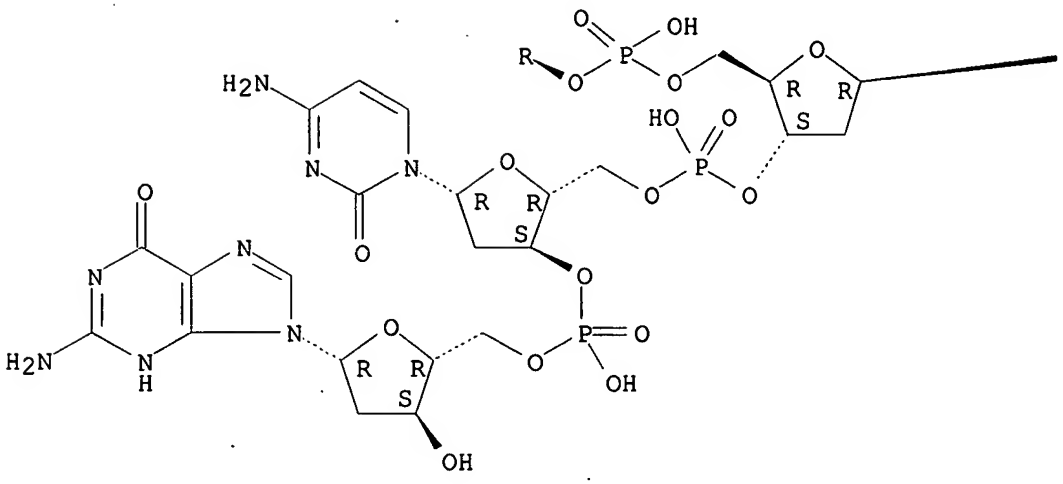

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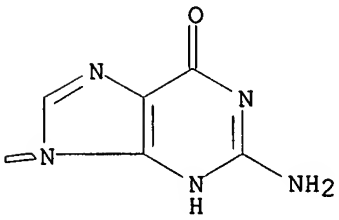
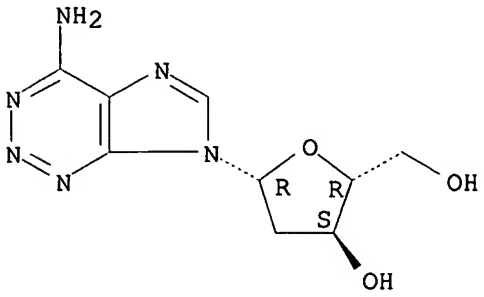


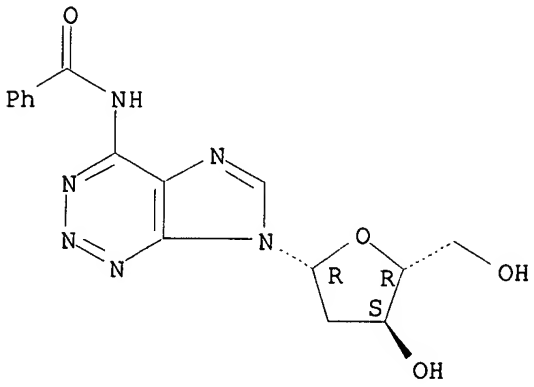
IT **34536-05-5P 261776-86-7P 261776-87-8P**
261776-88-9P 261776-96-9P 261776-97-0P
261776-98-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis, **base-pairing** selectivity and stacking properties of oligonucleotides incorporating 2-aza-2'-deoxyadenosine)
RN 34536-05-5 CAPLUS
CN 7H-Imidazo[4,5-d]-1,2,3-triazin-4-amine, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



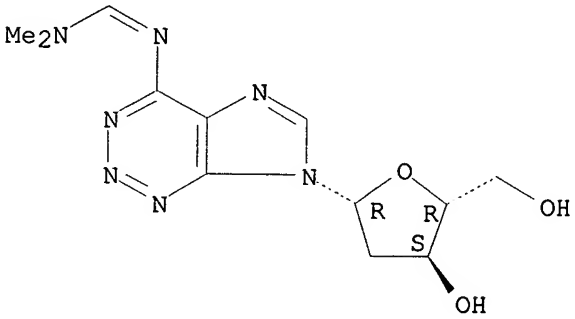
RN 261776-86-7 CAPLUS
CN Benzamide, N-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



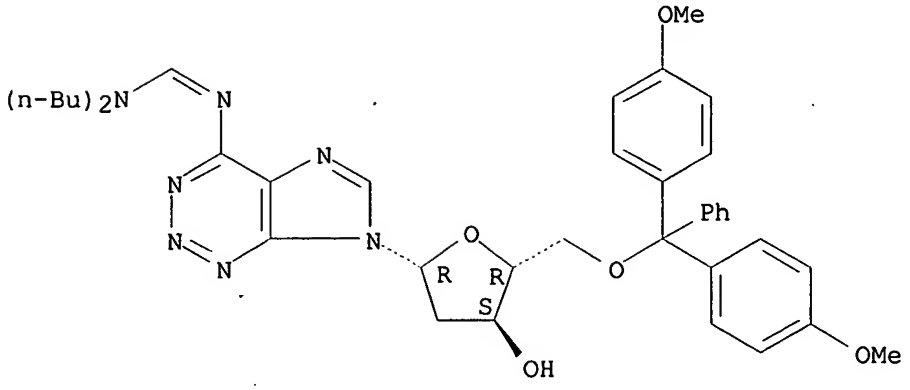
RN 261776-87-8 CAPLUS
CN Methanimidamide, N'-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



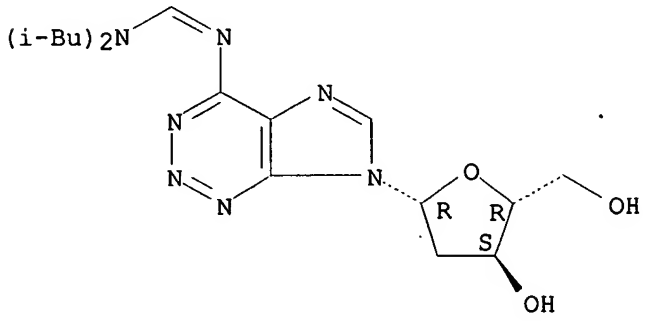
RN 261776-88-9 CAPLUS
CN Methanimidamide, N'-[7-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-2-deoxy-.beta.-D-erythro-pentofuranosyl]-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-dibutyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



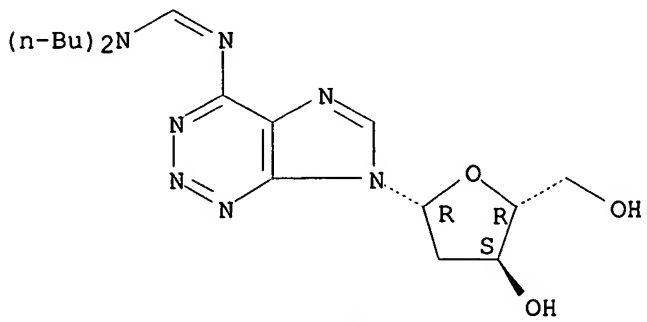
RN 261776-96-9 CAPLUS
CN Methanimidamide, N'-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-bis(2-methylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RN 261776-97-0 CAPLUS
CN Methanimidamide, N,N-dibutyl-N'-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]- (9CI) (CA INDEX NAME)

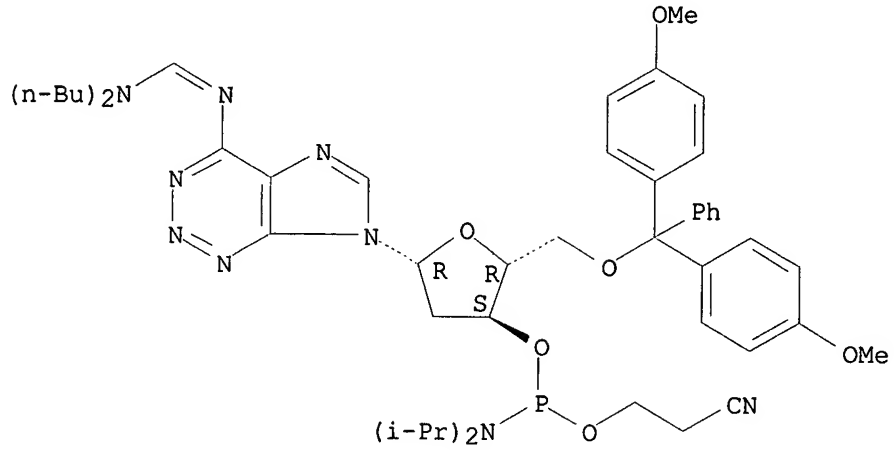
Absolute stereochemistry.
Double bond geometry unknown.



RN 261776-98-1 CAPLUS
CN Methanimidamide, N'-[7-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-2-deoxy-.beta.-D-erythro-pentofuranosyl]-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-dibutyl- (9CI)

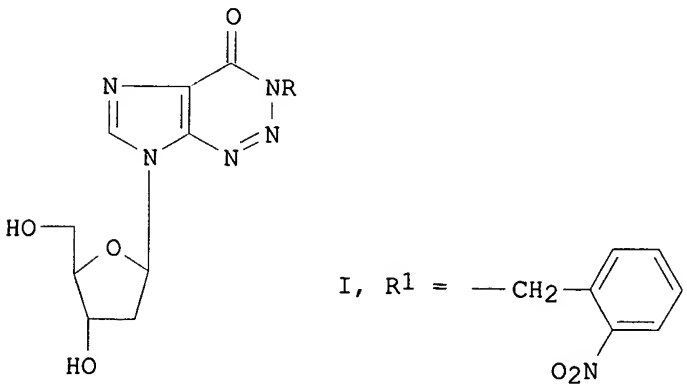
(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L100 ANSWER 5 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5
ACCESSION NUMBER: 1995:806967 CAPLUS
DOCUMENT NUMBER: 124:202868
TITLE: Synthesis and biophysical and biological properties of oligonucleotides containing 2-aza-2'-deoxyinosine
AUTHOR(S): Acedo, Montse; De Clercq, Erik; Eritja, Ramon
CORPORATE SOURCE: Centro de Investigacion y Desarrollo, C. S. I. C., Barcelona, 08034, Spain
SOURCE: Journal of Organic Chemistry (1995), 60(20), 6262-9
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 22 Sep 1995
GI

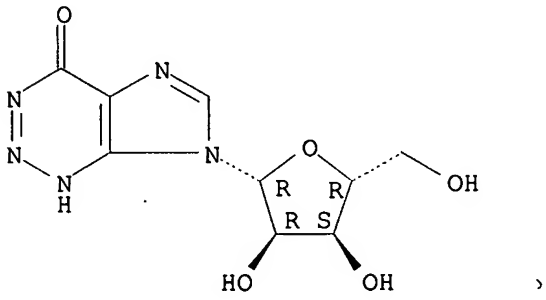


AB 2-Aza-2'-deoxyinosines, e.g. I (R = H, R1), were prepd. and incorporated

into oligodeoxyribonucleotide duplexes. Protection of the 2-azahypoxanthine moiety with the photolabile 2-nitrobenzyl group enabled us to obtain the phosphoramidite deriv. and oligodeoxyribonucleotides contg. protected 2-aza-2'-deoxyinosine. After purifn., photolysis of the oligonucleotides contg. the protected analog provided the desired oligonucleotides in good yields. Melting curves of duplexes contg. 2-azahypoxanthine **paired** with the four natural **bases** at pH 6 and pH 8 proved that 2-azahypoxanthine **base pairs** were less stable than perfectly matched duplexes but showed little variation among different bases. Compds. I showed no significant antiviral and cytotoxicity activities.

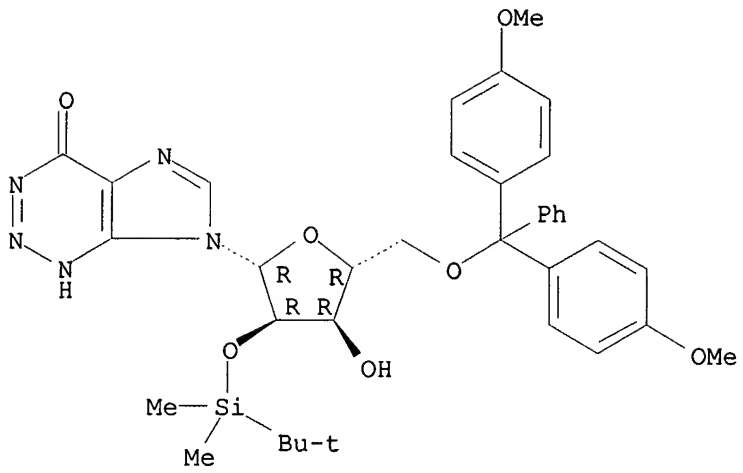
IT **36519-16-1**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(synthesis and antiviral and cytotoxicity of 2-aza-2'-deoxyinosine-contg. oligodeoxyribonucleotide duplexes)
RN 36519-16-1 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 1,7-dihydro-7-.beta.-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



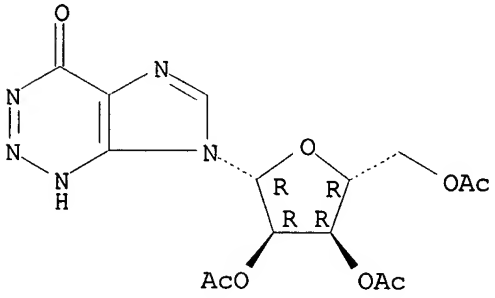
IT **171614-00-9P**
RL: BYP (Byproduct); PREP (Preparation)
(synthesis and antiviral and cytotoxicity of 2-aza-2'-deoxyinosine-contg. oligodeoxyribonucleotide duplexes)
RN 171614-00-9 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-2-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-ribofuranosyl]-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



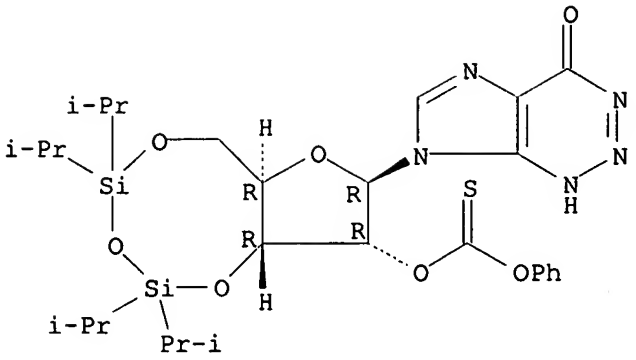
IT **36519-17-2P 139123-74-3P 139137-03-4P**
171614-02-1P 171614-03-2P 171614-04-3P
171614-05-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and antiviral and cytotoxicity of 2-aza-2'-deoxyinosine-contg. oligodeoxyribonucleotide duplexes)
RN 36519-17-2 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 1,7-dihydro-7-(2,3,5-tri-O-acetyl-.beta.-D-ribofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



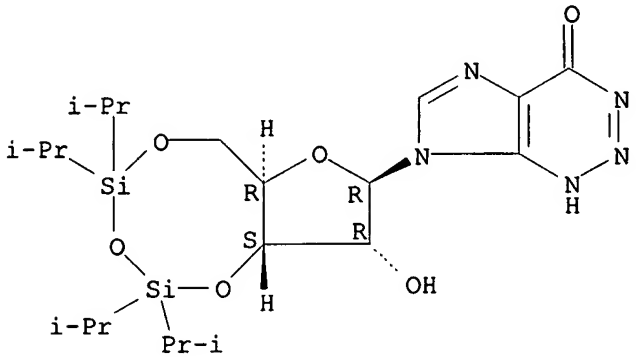
RN 139123-74-3 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 1,7-dihydro-7-[2-O-(phenoxythioxomethyl)-3,5-O-[1,1,3,3-tetrakis(1-methylethyl)-1,3-disiloxanediyl]-.beta.-D-ribofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



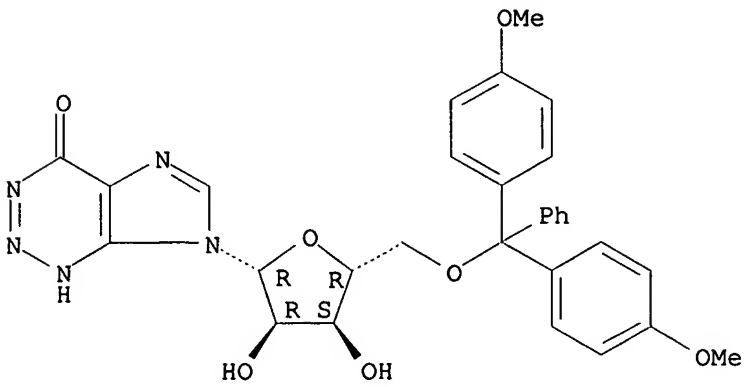
RN 139137-03-4 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 1,7-dihydro-7-[3,5-O-[1,1,3,3-tetrakis(1-methylethyl)-1,3-disiloxanediyl]-.beta.-D-ribofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 171614-02-1 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-.beta.-D-ribofuranosyl]-1,7-dihydro- (9CI) (CA INDEX NAME)

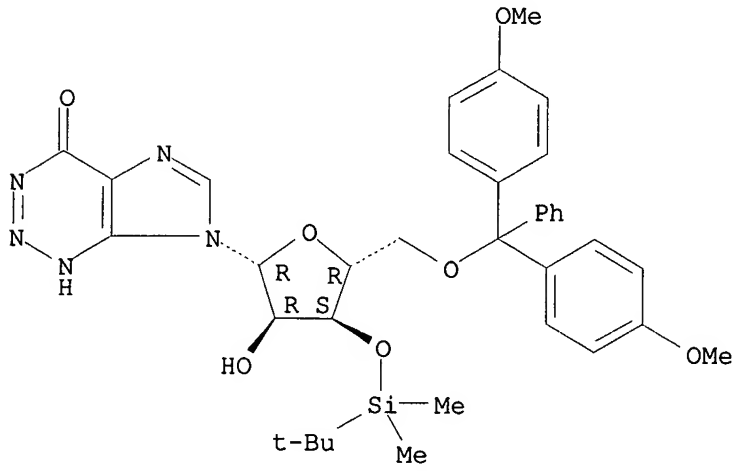
Absolute stereochemistry.



RN 171614-03-2 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-[5-O-[bis(4-

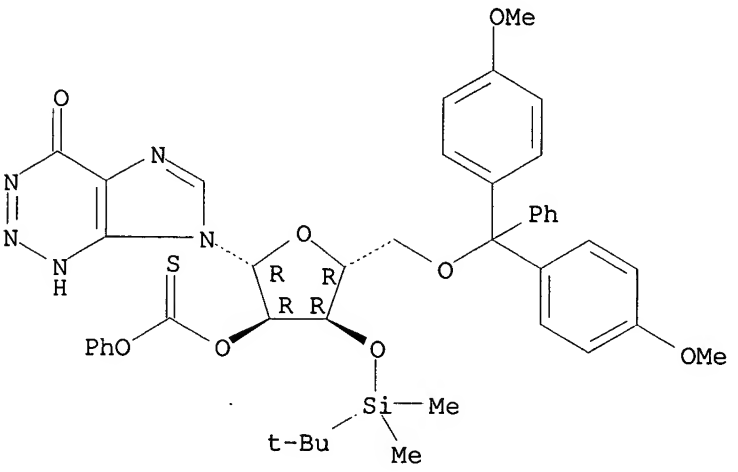
methoxyphenyl)phenylmethyl]-3-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-ribofuranosyl]-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



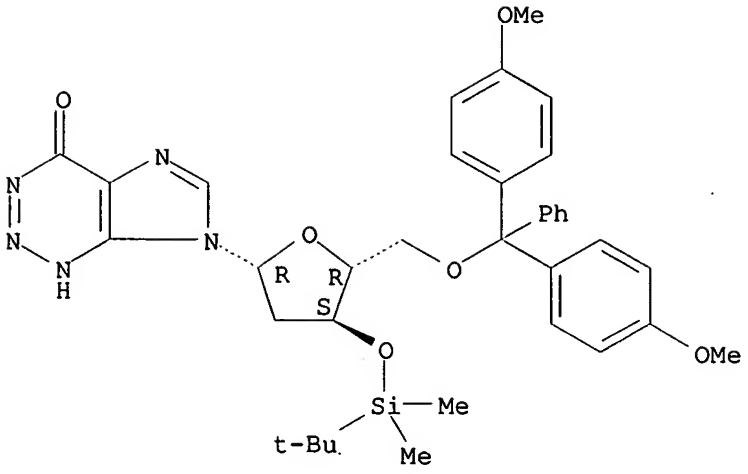
RN 171614-04-3 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[(1,1-dimethylethyl)dimethylsilyl]-2-O-(phenoxythioxomethyl)-.beta.-D-ribofuranosyl]-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

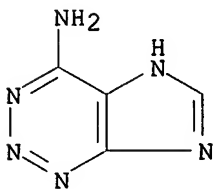


RN 171614-05-4 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-2-deoxy-3-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-erythro-pentofuranosyl]-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L100 ANSWER 6 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 7
ACCESSION NUMBER: 1991:464122 CAPLUS
DOCUMENT NUMBER: 115:64122
TITLE: Interaction energy studies on antibiotics nucleoside analogs 2-azaadenine
AUTHOR(S): Sanyal, Nitish K.; Ojha, Rajendra Prasad; Roychoudhury, Mihir
CORPORATE SOURCE: Dep. Phys., Univ. Gorakhpur, Gorakhpur, 273009, India
SOURCE: Journal of Theoretical Biology (1991), 150(3), 277-86
CODEN: JTBIAP; ISSN: 0022-5193
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 23 Aug 1991
AB The 2-azaadenine antibiotic is known to be a potent cytotoxic nucleoside analog. Evaluation of the interaction energy of this mol. with nucleic acid **bases** and **base pairs** has been performed using a quantum-mech. perturbation technique. Both in-plane and stacking energies have been computed. These energy values along with their sites of assocn. have been compared with the std. energy values and spatial positions for the nucleic acid bases during transcription. The results have been examd. in the light of their biol. significance.
IT **2308-56-7**, 2-Azaadenine
RL: BIOL (Biological study)
(interaction energy study on, antimicrobial action in relation to)
RN 2308-56-7 CAPLUS
CN 1H-Imidazo[4,5-d]-1,2,3-triazin-4-amine (9CI) (CA INDEX NAME)



L100 ANSWER 7 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:892951 CAPLUS
DOCUMENT NUMBER: 139:359871
TITLE: Annealing control **primer** for improving

annealing specificity in nucleic acid amplification and its potential use in diagnosis of cancer
INVENTOR(S): Chun, Jong Yoon
PATENT ASSIGNEE(S): Seegene, Inc., S. Korea
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003093509	A1	20031113	WO 2002-KR816	20020501
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
WO 2003050305	A1	20030619	WO 2002-KR1781	20020919
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WO 2003050306	A1	20030619	WO 2002-KR2051	20021104
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: WO 2001-KR2133 A 20011208
WO 2002-KR816 A 20020501

ED Entered STN: 14 Nov 2003

AB The present invention is directed to novel methods and compns. for improving the specificity of PCR amplification. Specifically it relates to a novel annealing control primer system named ACP system which allows primer annealing to be controlled in assocn. with annealing temp., such that the specificity of PCR amplification can be significantly improved during PCR. The principle of the ACP system is based on the compn. of an oligonucleotide primer having 3' - and 5' -end distinct portions sepd. by at least one deoxyinosine group and the effect of the deoxyinosine group on the annealing of the 3' -and 5' -end portion each, in connection with the alteration of annealing temp., which are unique features of this invention. The presence of deoxyinosine group positioned between the 3' - and 5' - end portions plays as a switch in controlling primer annealing to a template nucleic acid in assocd. with annealing temp. during polymerase

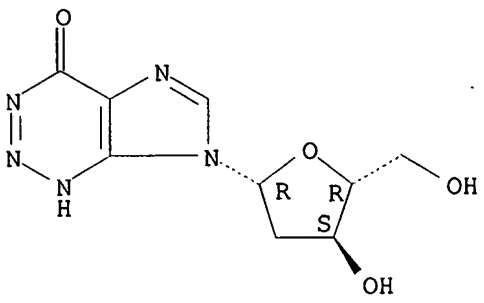
chain reaction (PCR) due to the property of deoxyinosine as universal base. The present invention provides an improved method for selectively amplifying a target nucleic acid fragment from a nucleic acid or a mixt. using ACP system. The present invention also provides an improved method for detecting differentially expressed mRNAs in two or more nucleic acid samples using the ACP system. The present invention also provides an improved method for rapidly amplifying cDNA ends, so called RACE technologies related to both of 3' - and 5' -end, full-length cDNAs, and 5' -enriched cDNAs using the ACP system. Kits contg. ACP are included within the scope of the present invention. Furthermore, the ACP system in this present invention can be also adapted to almost unlimited application in all fields of PCR-based technol and more specifically to cancer diagnosis.

IT **56220-50-9**, 2-Aza-2'-deoxyinosine
RL: BUU (Biological use, unclassified); RGT (Reagent); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(annealing control **primer** for improving annealing specificity in nucleic acid amplification and its potential use in diagnosis of cancer)

RN 56220-50-9 CAPLUS

CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L100 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:472654 CAPLUS
DOCUMENT NUMBER: 139:48121
TITLE: Dual function **hybridization** portion control (HPC) oligonucleotide with novel structure having universal bases and its uses
INVENTOR(S): Chun, Jong-yoon
PATENT ASSIGNEE(S): Seegene, Inc., S. Korea
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003050306	A1	20030619	WO 2002-KR2051	20021104

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2003050304 A1 20030619 WO 2001-KR2133 20011208

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2003093509 A1 20031113 WO 2002-KR816 20020501

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

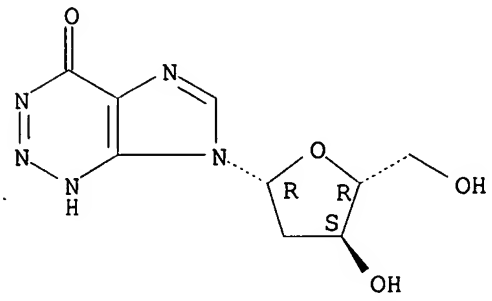
PRIORITY APPLN. INFO.: WO 2001-KR2133 A 20011208
WO 2002-KR816 A 20020501

ED Entered STN: 20 Jun 2003

AB The present invention is generally directed to an oligonucleotide having dual functions for generating specific hybridization and verifying hybridization results quant. The oligonucleotide of this invention, named hybridization portion control oligonucleotide (hereinafter referred to as "HPC oligonucleotide"), ensures a very specific hybridization reaction to a target nucleotide sequence, such that a variety of analyses using hybridization can be performed with higher reliability. The principle of the HPC oligonucleotide is based on its novel structure having (i) a first hybridization portion having a nucleotide sequence substantially complementary to target nucleotide sequence, (ii) a second hybridization portion having a preselected arbitrary nucleotide sequence, and (iii) a regulator portion comprising at least two universal bases or nondiscriminatory analogs positioned between the first hybridization portion and the second hybridization portion. The present HPC oligonucleotide allows the first and second hybridization portions to be involved in two independent hybridizations as a first hybridization and second hybridization, resp. The presence of universal base or nondiscriminatory base residue group in the HPC oligonucleotide permits only the first hybridization portion to be hybridized with target nucleotide sequence of interest at a first hybridization. Furthermore, the second hybridization portion serves as a universal hybridizing site at a second hybridization for quant. verification of the results from the first hybridization reaction. Therefore, solely using this dual functional HPC oligonucleotide, a specific hybridization with target nucleotide sequence and a quant. verification of the first hybridization results can be accomplished. The effect of universal base residues such as deoxyinosines positioned between the 3'-and 5'-end portions of HPC oligonucleotide was evaluated by SNP genotyping anal. using three different types of oligonucleotides each having allele-specific 10-mers, including conventional short and long oligonucleotides and HPC oligonucleotide. In order to demonstrate the application of HPC oligonucleotides to single nucleotide polymorphism genotyping, HPC oligonucleotides have been applied for a single nucleotide polymorphism

(SNP) of human p53 (TP53) gene.
IT **56220-50-9**, 2-Aza-2'-deoxyinosine
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(universal bases or nondiscriminatory analogs; dual function **hybridization** portion control (HPC) oligonucleotide with novel structure having universal bases and its uses)
RN 56220-50-9 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L100 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:168007 CAPLUS
DOCUMENT NUMBER: 134:203403
TITLE: 2-Azapurines and their incorporation into oligonucleotides for use as **hybridization probes**
INVENTOR(S): Seela, Frank; Rosemeyer, Helmut; Schweinberger, Enno; Heindl, Dieter; Bergmann, Frank
PATENT ASSIGNEE(S): Roche Diagnostics G.m.b.H., Germany
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001016149	A2	20010308	WO 2000-EP8371	20000828
W: CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1214331	A2	20020619	EP 2000-960534	20000828
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
JP 2003508405	T2	20030304	JP 2001-519712	20000828

PRIORITY APPLN. INFO.: EP 1999-116767 A 19990830
WO 2000-EP8371 W 20000828

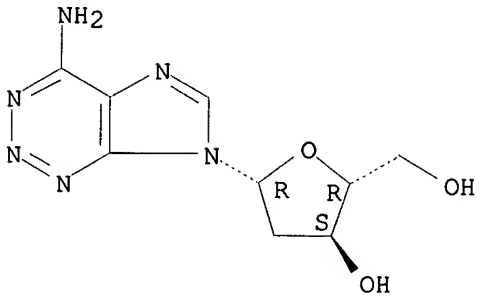
ED Entered STN: 09 Mar 2001
AB Within oligonucleotides 2-azapurine and esp. 2-azaadenine **bases** form **base pairs** with guanine. This **base pair** is of similar stability to the adenine-thymine **base pair** but is less stable than the guanine-cytosine **base pair**. Therefore, the incorporation of 2-azaadenine residues into

oligonucleotides instead of cytosine leads specifically to hybridization complexes with nucleic acids with homogeneous stability. This is useful for the adaptation of the stabilities of different oligonucleotide sequences in all kinds of hybridization techniques, for example in oligomer chip technol. Thus, the synthesis of 2-azahypoxanthine and 2-azaadenosine and derivs. is described. The hybridization behavior of oligonucleotides contg. 2-azaadenosine is analyzed.

IT **34536-05-5P 56220-50-9P 261776-86-7P**
261776-87-8P 261776-88-9P 261776-96-9P
261776-97-0P 261776-98-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(2-Azapurines and their incorporation into oligonucleotides for use as **hybridization probes**)

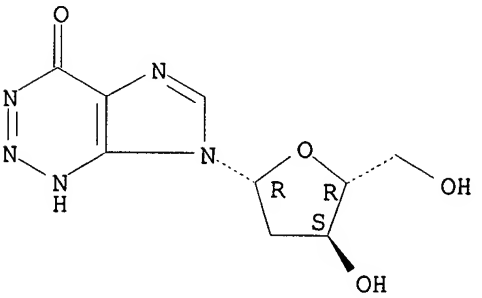
RN 34536-05-5 CAPLUS
CN 7H-Imidazo[4,5-d]-1,2,3-triazin-4-amine, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



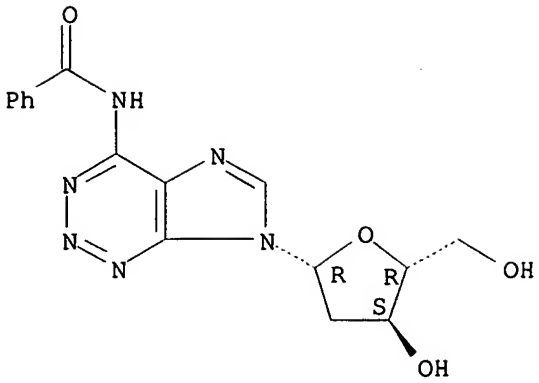
RN 56220-50-9 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



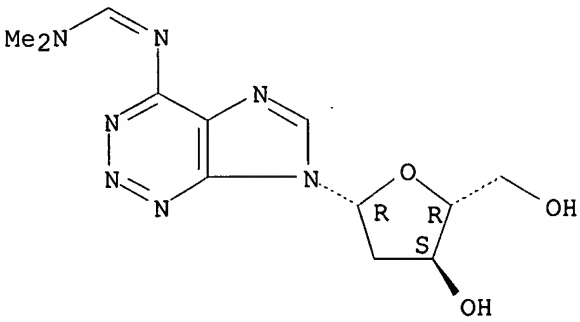
RN 261776-86-7 CAPLUS
CN Benzamide, N-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



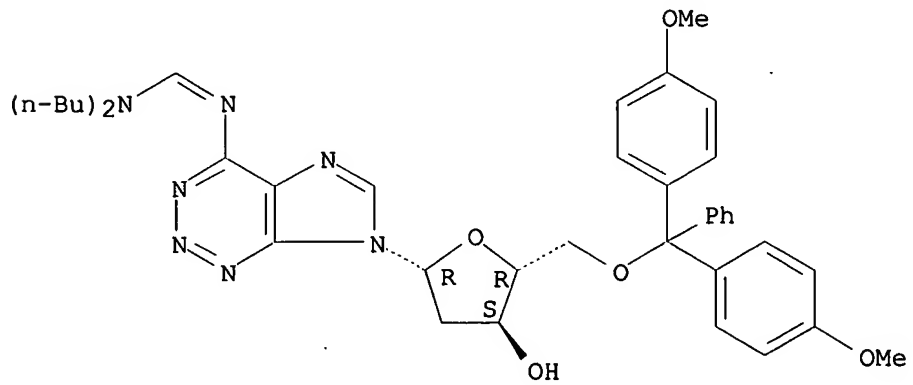
RN 261776-87-8 CAPLUS
CN Methanimidamide, N'-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RN 261776-88-9 CAPLUS
CN Methanimidamide, N'-[7-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-2-deoxy-.beta.-D-erythro-pentofuranosyl]-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-dibutyl- (9CI) (CA INDEX NAME)

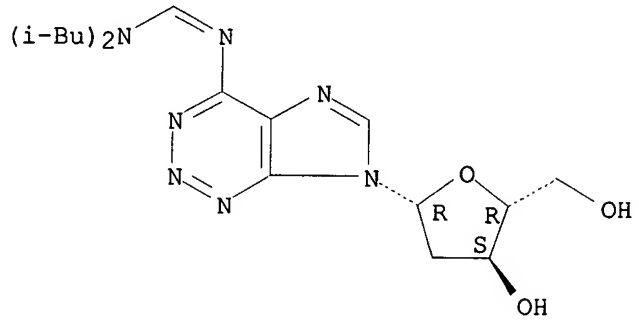
Absolute stereochemistry.
Double bond geometry unknown.



RN 261776-96-9 CAPLUS
CN Methanimidamide, N'-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-

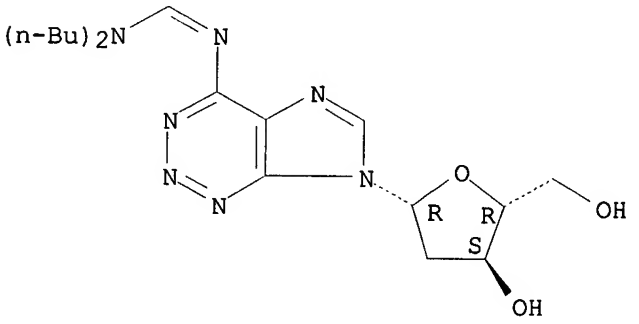
imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-bis(2-methylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



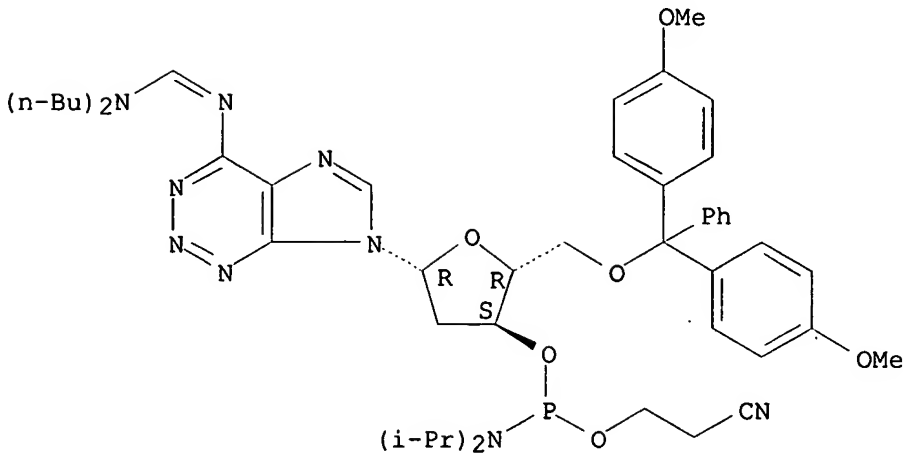
RN 261776-97-0 CAPLUS
CN Methanimidamide, N,N-dibutyl-N'-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RN 261776-98-1 CAPLUS
CN Methanimidamide, N'-[7-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-2-deoxy-.beta.-D-erythro-pentofuranosyl]-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-dibutyl- (9CI) (CA INDEX NAME)

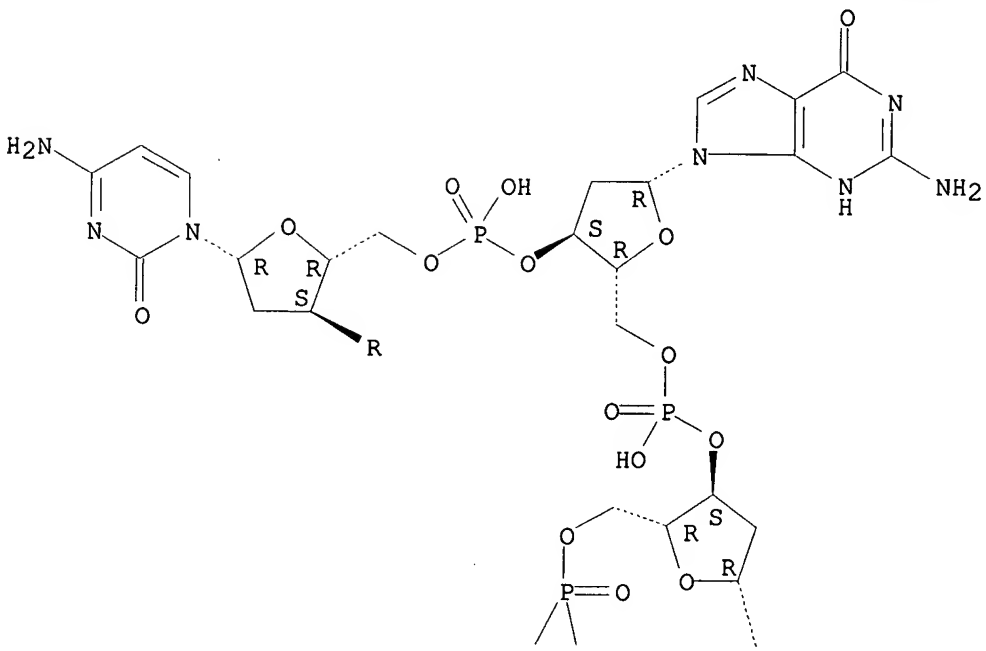
Absolute stereochemistry.
Double bond geometry unknown.



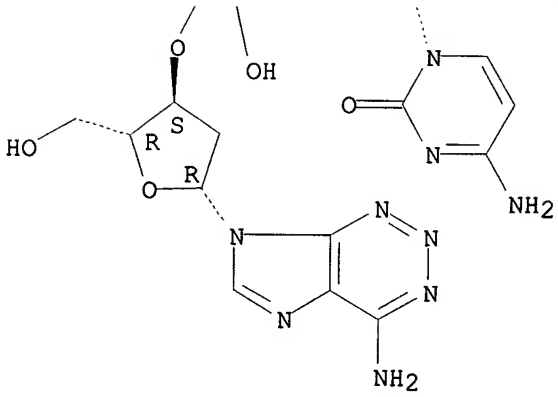
L100 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:234223 CAPLUS
DOCUMENT NUMBER: 133:89731
TITLE: Synthesis, **base pairing** and stacking properties of oligonucleotides containing 2-Aza-2'-deoxyadenosine
AUTHOR(S): Seela, Frank; Sugiyama, Tamizi; Schweinberger, Enno; Rosemeyer, Helmut
CORPORATE SOURCE: Laboratorium fur Organische und Bioorganische Chemie, Universitat Osnabruck, Osnabruck, D-49069, Germany
SOURCE: Collection Symposium Series (1999), 2(Chemistry of Nucleic Acid Components), 124-128
CODEN: CSYSFN
PUBLISHER: Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 Apr 2000
AB 2-Aza-2'-deoxyadenosine (I) is synthesized via its 1,N6-etheno deriv. The phosphoramidite, obtained from compd. I, is employed in the solid-phase synthesis of oligonucleotides. The 2-azapurine **base** forms a strong **base pair** with guanine but much weaker ones with adenine, thymine and cytosine, the effect of compd. I as a pending residue on one or both termini is studied and compared with other modified 2'-deoxyadenosine derivs. including 7-deaza-2'-deoxyadenosine.
IT **261776-89-0DP**, self-**complementary**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (synthesis, **base pairing**, stacking properties, and thermodn. of oligonucleotides contg. azadeoxyadenosine)
RN 261776-89-0 CAPLUS
CN Guanosine, 2'-deoxy-2-azaadenylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxyguanylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxyguanylyl-(3'.fwdarw.5')-2'-deoxycytidylyl-(3'.fwdarw.5')-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

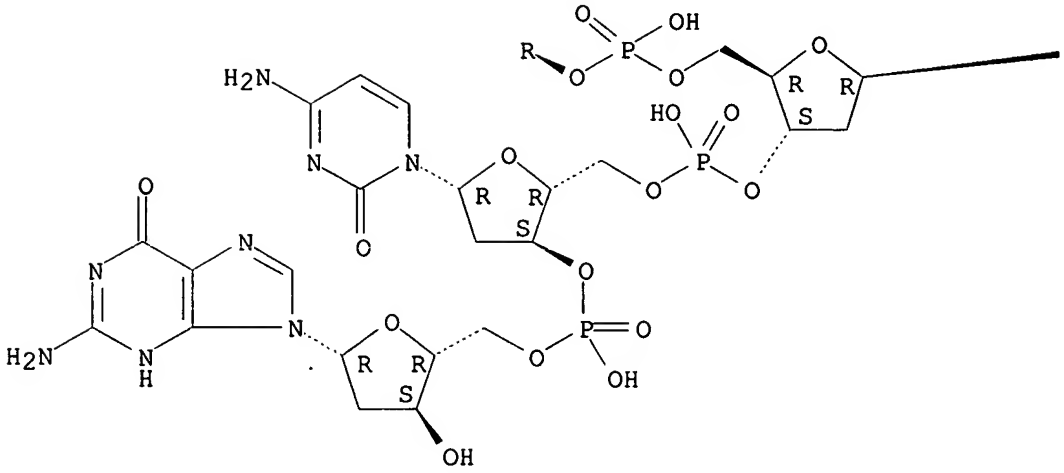
PAGE 1-A



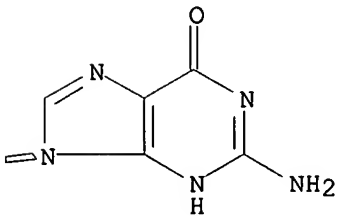
PAGE 2-A



PAGE 3-A

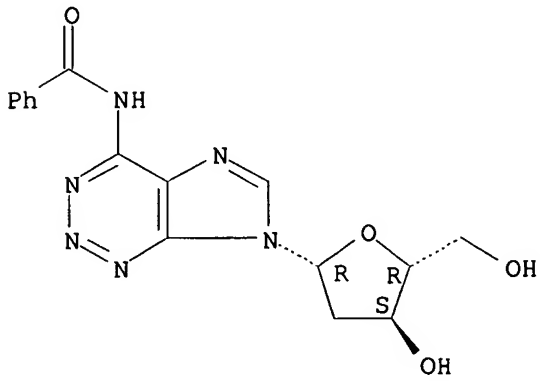


PAGE 3-B



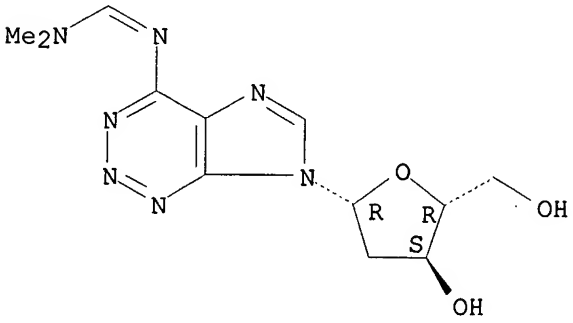
IT **261776-86-7 261776-87-8 261776-96-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis, **base pairing**, stacking properties, and thermodn. of oligonucleotides contg. azadeoxyadenosine)
RN 261776-86-7 CAPLUS
CN Benzamide, N-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



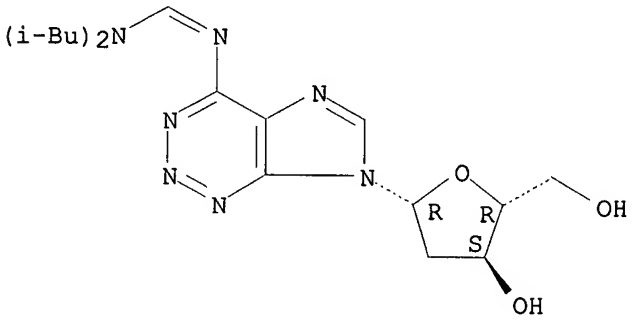
RN 261776-87-8 CAPLUS
CN Methanimidamide, N'-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



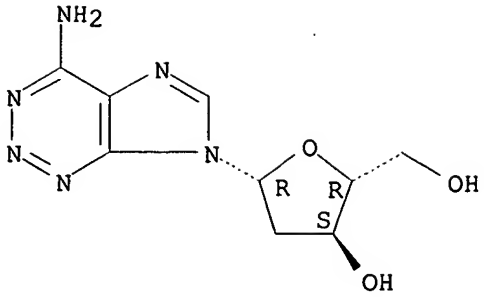
RN 261776-96-9 CAPLUS
CN Methanimidamide, N'-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-bis(2-methylpropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



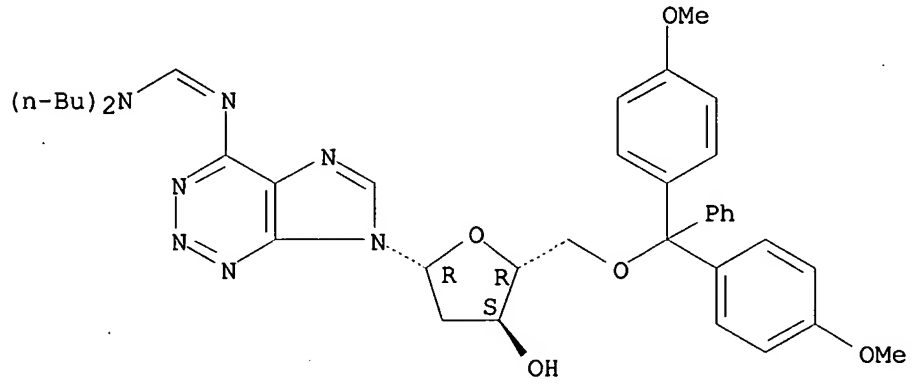
IT **34536-05-5P 261776-88-9P 261776-97-0P 261776-98-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis, **base pairing**, stacking properties, and thermodn. of oligonucleotides contg. azadeoxyadenosine)
RN 34536-05-5 CAPLUS
CN 7H-Imidazo[4,5-d]-1,2,3-triazin-4-amine, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



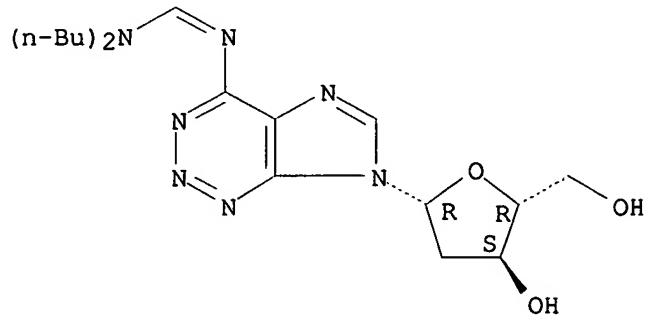
RN 261776-88-9 CAPLUS
CN Methanimidamide, N'-[7-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-2-deoxy-.beta.-D-erythro-pentofuranosyl]-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-dibutyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



RN 261776-97-0 CAPLUS
CN Methanimidamide, N,N-dibutyl-N'-[7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]- (9CI) (CA INDEX NAME)

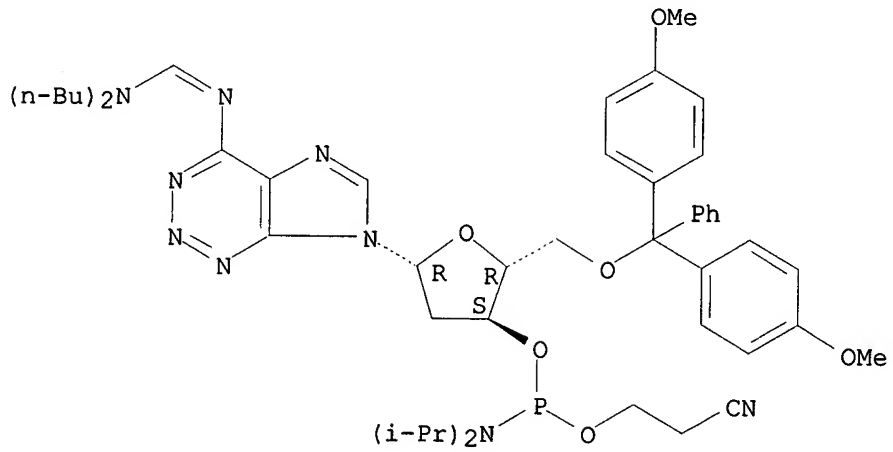
Absolute stereochemistry.
Double bond geometry unknown.



RN 261776-98-1 CAPLUS
CN Methanimidamide, N'-[7-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-2-deoxy-.beta.-D-erythro-pentofuranosyl]-7H-imidazo[4,5-d]-1,2,3-triazin-4-yl]-N,N-dibutyl- (9CI)

(CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L100 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:145210 CAPLUS
DOCUMENT NUMBER: 126:140559
TITLE: Design of heterocyclic base residues of synthetic oligonucleotides for binding as third strand to complementary nucleic acid duplexes
INVENTOR(S): Fresco, Jacques R.; Lin, Bin; Klotz, Lynn C.
PATENT ASSIGNEE(S): Princeton University, USA; Oncorpharm, Inc.
SOURCE: PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9641009	A1	19961219	WO 1996-US9428	19960606
W: AU, BR, CA, CN, CZ, FI, HU, IL, JP, KP, KR, MX, NO, NZ, SG, SK, UA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6426407	B1	20020730	US 1995-473888	19950607
AU 9662601	A1	19961230	AU 1996-62601	19960606
EP 871772	A1	19981021	EP 1996-921358	19960606
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: US 1995-473888 A 19950607
WO 1996-US9428 W 19960606

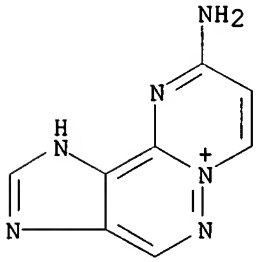
ED Entered STN: 06 Mar 1997
AB The invention is related to rules and guidelines for designing heterocyclic bases which, when incorporated into oligonucleotides permit those oligonucleotides to serve as third strand nucleic acids capable of specific binding to complementary double-stranded nucleic acids of any **base-pair** sequence without a requirement for a purine-rich strand. The design process proceeds as follows: (1) Choose the third-strand binding motif for which the residue is to be designed. (2) Det. the planar mol. framework to which hydrogen bonding substituents

or functional groups are to be added in conformity with the 2D rules and guidelines for that motif. (3) Complete the design either by database searching for mols. with the desired mol. framework and appropriate functional groups or by constructing a novel residue with the desired mol. framework and appropriate functional groups. (4) Confirm the design using 2D and 3D space-filling models and energy minimization techniques. In this design process, 3D space-filling modeling is used only to confirm a design, a much simpler use of 3D modeling than de novo design. (5) Synthesize the residue and incorporate into a third-strand oligonucleotide to quantify its stability and specificity in the appropriate triplex test system for that motif. Design process elements include duplex conservation, glycosyl bond correspondence, glycosyl bond direction, framework planarity, chem. group restriction, duplex hydrogen-bonding target, no. of H bonds, water-mediated H bonds, and nonstandard H bonds. Exemplary bases, including a novel 3-ring residue, are shown which were designed according to the inventive method.

IT **186751-35-9**
RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process); USES (Uses)
(designed heterocyclic base; design of heterocyclic base residues of synthetic oligonucleotides for binding as third strand to complementary nucleic acid duplexes)

RN 186751-35-9 CAPLUS

CN 1H-Imidazo[4,5-d]pyrimido[1,2-b]pyridazin-6-ium, 9-amino- (9CI) (CA INDEX NAME)



L100 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:245471 CAPLUS

DOCUMENT NUMBER: 123:170044

TITLE: Synthesis of 2'-deoxy-.beta.-D-ribonucleosides and 2,3-dideoxy-.beta.-D-pentofuranosides on **immobilized** bacterial cells

AUTHOR(S): Votruba, Ivan; Holy, Antonin; Dvorakova, Hana; Gunter, Jaroslav; Hockova, Dana; Hrebabecky, Hubert; Cihlar, Tomas; Masojidkova, Milena

CORPORATE SOURCE: Institute Organic Chemistry Biochemistry, Academy Sciences Czech Republic, Prague, 166 10, Czech Rep.

SOURCE: Collection of Czechoslovak Chemical Communications (1994), 59(10), 2303-30
CODEN: CCCCAK; ISSN: 0010-0765

PUBLISHER: Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 14 Dec 1994

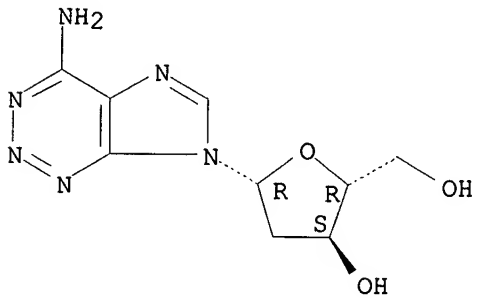
AB Alginate gel-entrapped cells of auxotrophic thymine-dependent strain of E. coli catalyze the transfer of 2-deoxy-D-ribofuranosyl moiety of 2'-deoxyuridine to purine and pyrimidine bases as well as their aza and deaza analogs. All expts. invariably gave .beta.-anomers; in most cases,

the reaction was regiospecific, affording N9-isomers in the purine and N1-isomers in the pyrimidine series. Also a 2,3-dideoxynucleoside can serve as donor of the glycosyl moiety. The acceptor activity of purine bases depends only little on substitution, the only condition being the presence of N7-nitrogen atom. On the other hand, in the pyrimidine series the activity is limited to only a narrow choice of mostly short 5-alkyl and 5-halo uracil derivs. Heterocyclic bases contg. amino groups are deaminated; this can be avoided by conversion of the base to the corresponding N-dimethylaminomethylene deriv. which is then ammonolyzed. The method was verified by isolation of 9-(2-deoxy-.beta.-D-ribofuranosyl) derivs. of adenine, guanine, 2-chloroadenine, 6-methylpurine, 8-azaadenine, 8-azaguanine, 1-deazaadenine, 3-deazaadenine, 1-(2-deoxy-.beta.-D-ribofuranosyl) derivs. of 5-ethyluracil, 5-fluorouracil, and 9-(2,3-dideoxy-.beta.-D-pentofuranosyl)hypoxanthine, 9-(2,3-dideoxy-.beta.-D-pentofuranosyl)-6-methylpurine, and other nucleosides.

IT **34536-05-5P 56220-50-9P 167083-85-4P**
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of deoxy and dideoxyribonucleosides by transglycosylation using **immobilized** bacterial cells)

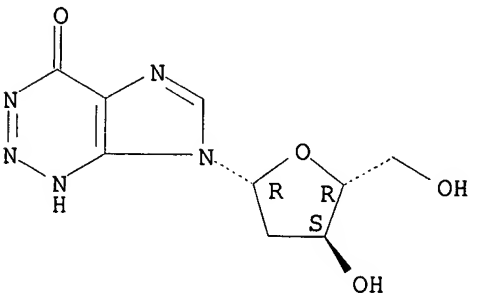
RN 34536-05-5 CAPLUS
CN 7H-Imidazo[4,5-d]-1,2,3-triazin-4-amine, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



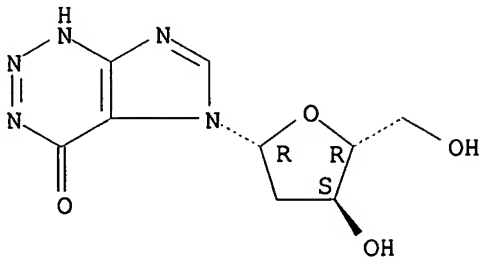
RN 56220-50-9 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-1,7-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 167083-85-4 CAPLUS
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 5-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-1,5-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

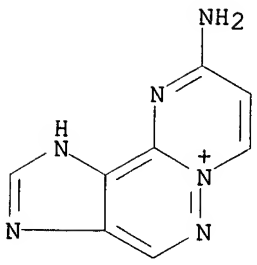


L100 ANSWER 13 OF 27 USPATFULL on STN
ACCESSION NUMBER: 2002:188395 USPATFULL
TITLE: Residues for binding third strands to complementary nucleic acid duplexes of any **base pair** sequence
INVENTOR(S): Fresco, Jacques R., Princeton, NJ, United States
Liu, Bin, San Francisco, CA, United States
Klotz, Lynn C., Somerville, MA, United States
PATENT ASSIGNEE(S): Codon Pharm., Gaithersburg, MD, United States (U.S. corporation)
Princeton Univ., Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6426407	B1	20020730	
APPLICATION INFO.:	US 1995-473888		19950607	(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Fredman, Jeffrey
LEGAL REPRESENTATIVE: Rothwell, Figg, Ernst & Manbeck
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT: 2324
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to compositions of matter capable of serving as residues for specific binding of third strands to double-stranded complementary nucleic acids of any **base-pair** sequence.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **186751-35-9**
(designed heterocyclic base; design of heterocyclic base residues of synthetic oligonucleotides for binding as third strand to complementary nucleic acid duplexes)
RN 186751-35-9 USPATFULL
CN 1H-Imidazo[4,5-d]pyrimido[1,2-b]pyridazin-6-ium, 9-amino- (9CI) (CA INDEX NAME)



L100 ANSWER 14 OF 27 USPATFULL on STN
ACCESSION NUMBER: 97:117885 USPATFULL
TITLE: Methods for synthetic unrandomization of oligomer fragments
INVENTOR(S): Cook, Phillip Dan, San Marcos, CA, United States
Ecker, David J., Leucadia, CA, United States
Wyatt, Jacqueline, Carlsbad, CA, United States
Bruice, Thomas W., Carlsbad, CA, United States
Anderson, Kevin, Carlsbad, CA, United States
Hanecak, Ronnie, San Clemente, CA, United States
Vickers, Timothy, Oceanside, CA, United States
Davis, Peter, Carlsbad, CA, United States
Freier, Susan M., San Diego, CA, United States
Sanghvi, Yogesh S., San Marcos, CA, United States
Brown-Driver, Vickie, San Diego, CA, United States
PATENT ASSIGNEE(S): ISIS Pharmaceuticals, Inc., Carlsbad, CA, United States (U.S. corporation)

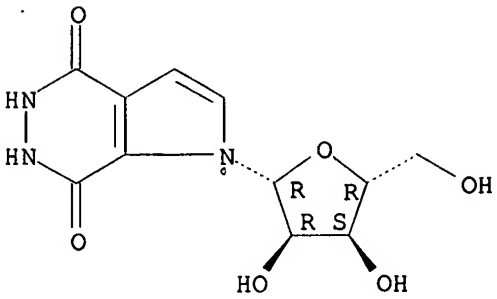
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5698391		19971216	
APPLICATION INFO.:	US 1994-357396		19941216	(8)

DISCLAIMER DATE: 20140222
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-196103, filed on 22 Feb 1994 which is a continuation-in-part of Ser. No. US 1991-749000, filed on 23 Aug 1991, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Chambers, Jasemine C.
ASSISTANT EXAMINER: Priebe, Scott D.
LEGAL REPRESENTATIVE: Woodcock Washburn Kurtz Mackiewicz & Norris, LLP
NUMBER OF CLAIMS: 80
EXEMPLARY CLAIM: 1,34
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 2713
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods useful for the determination of oligomers which have specific activity for a target molecule from a pool of primarily randomly assembled oligomers are provided. The disclosed methods involve repeated syntheses of increasingly simplified sets of oligomers coupled with selection procedures for determining oligomers having the highest activity. Freedom from the use of enzymes allows the application of these methods to any molecules which can be oligomerized in a controlled fashion.

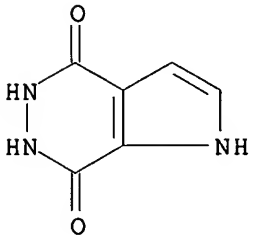
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **150885-27-1P 201002-56-4P**
(synthetic Unrandomization of Random oligomer Fragments (SURF), nonenzymic method for detg. oligomers with specific target activity)
RN 150885-27-1 USPATFULL

CN 1H-Pyrrolo[2,3-d]pyridazine-4,7-dione, 5,6-dihydro-1-.beta.-D-ribofuranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 201002-56-4 USPATFULL
CN 1H-Pyrrolo[2,3-d]pyridazine-4,7-dione, 5,6-dihydro- (9CI) (CA INDEX NAME)



L100 ANSWER 15 OF 27 USPATFULL on STN

ACCESSION NUMBER:	92:62636 USPATFULL		
TITLE:	Light-sensitive silver halide photographic material		
INVENTOR(S):	Takamuki, Yasuhiko, Hino, Japan Fukawa, Junichi, Hino, Japan Habu, Takeshi, Hino, Japan		
PATENT ASSIGNEE(S):	Konica Corporation, Tokyo, Japan (non-U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 1091		19920804
APPLICATION INFO.:	US 1990-623257		19901205 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1989-388639, filed on 2 Aug 1989, now abandoned		
	NUMBER		DATE
PRIORITY INFORMATION:	JP 1988-199083		19880809
	JP 1988-202271		19880812
DOCUMENT TYPE:	Statutory		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Stoll, Robert L.		
ASSISTANT EXAMINER:	Anthony, Joseph D.		
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow, Garrett & Dunner		
NUMBER OF CLAIMS:	6		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1182		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB There is disclosed a light-sensitive silver halide photographic material

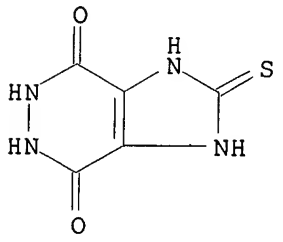
which comprises, in a light-sensitive silver halide photographic material provided by coating at least one layer of hydrophilic colloidal layer including light-sensitive silver halide photographic emulsion layer on a support, containing a specific hydrazide derivative in the light-sensitive silver halide emulsion layer and containing, in the hydrophilic colloidal layer, at least one compound selected from each of the groups A and B consisting of the compounds represented by the formulae (II) to (VII) as specified in the specification.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **98136-92-6 128920-49-0 128920-50-3**
(high-contrast photog. material contg. hydrazine deriv. and, for photomech. processes)

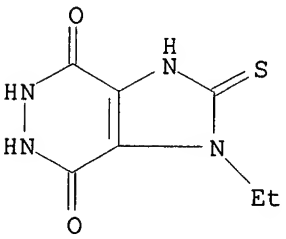
RN 98136-92-6 USPATFULL

CN 1H-Imidazo[4,5-d]pyridazine-4,7-dione, 2,3,5,6-tetrahydro-2-thioxo- (9CI) (CA INDEX NAME)



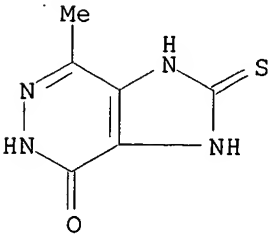
RN 128920-49-0 USPATFULL

CN 1H-Imidazo[4,5-d]pyridazine-4,7-dione, 1-ethyl-2,3,5,6-tetrahydro-2-thioxo- (9CI) (CA INDEX NAME)



RN 128920-50-3 USPATFULL

CN 4H-Imidazo[4,5-d]pyridazin-4-one, 1,2,3,5-tetrahydro-7-methyl-2-thioxo- (9CI) (CA INDEX NAME)



L100 ANSWER 16 OF 27 USPATFULL on STN

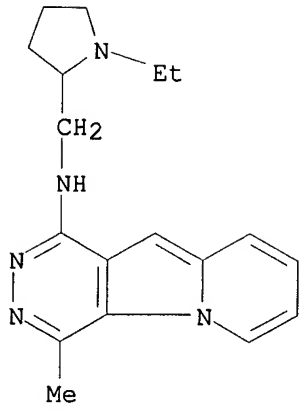
ACCESSION NUMBER: 91:5256 USPATFULL
TITLE: Pyridazino(4,5-b)indolizines
INVENTOR(S): Sabb, Annmarie L., Pennington, NJ, United States
Abou-Gharbia, Magid A., Glen Mills, PA, United States
Dionne, Gervais, St. Laurent, Canada
PATENT ASSIGNEE(S): American Home Products Corporation, New York, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4985560		19910115	
APPLICATION INFO.:	US 1990-464468		19900112	(7)

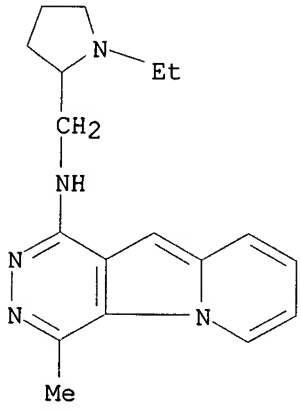
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Shah, Mukund J.
ASSISTANT EXAMINER: Bernhardt, E.
LEGAL REPRESENTATIVE: Jackson, Richard K.
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 862
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The compound of the formula: ##STR1## in which R.sup.1 is hydrogen, alkoxy, cyano, halo, nitro, amino, or mono- or dialkylamino; R.sup.2 is hydrogen, alkyl, phenyl, benzyl, 2-thienyl, 3-thienyl or 2-,3- or 4-pyridinyl; R.sup.3 is hydrogen, alkyl or phenyl; R.sup.4 is N-methyl-pyrrolidin-2yl, 2-, 3- or 4-pyridinyl, 3-quinuclidinyl or ##STR2## where n is 1 to 5; m is 0 to 3; and R.sup.8 is hydrogen or alkyl of 1 to 6 carbon atoms; or R.sup.4 is ##STR3## wherein: (a) n is 2, R.sup.5 taken with R.sup.3 is ethylene and R.sup.6 is --CHO, alkyl, unsubstituted or substituted phenyl, pyrimidinyl, pyridinyl, or pyrazinyl, where the substituents are alkyl, alkoxyl, halo, cyano, nitro or trifluoromethyl; (b) n is 1 to 5, and R.sup.5 and R.sup.6 taken together are polymethylene which may be alkyl substituted or R.sup.5 nd R.sup.6 are morpholino, 3-azabicyclo[3.2.2]nonan-3-yl, pyrrol-1-yl, pyrrolidin-2-on-1-ytl, pyrrolidin-2-thion-1-yl, imidazol-1-yl, alkyl-piperidin-1-yl or a piperazin-1-yl moiety in the 4-position of which is hydrogen, --CHO, alkyl or unsubstituted or substituted phenyl, pyrimidinyl, pyridinyl, or pyrazinyl, alkoxy, halo, cyano, nitro or trifluoromethyl; or (c) n is 1 to 5, and R.sup.5 and R.sup.6 are, independently, hydrogen, alkyl, phenyl, 3-quinuclidinyl, 2-adamantyl, bicyclo[3.2.1]octan-1-yl, bicyclo[3.3.1]nonan-9-yl or 2-,3- or 4-pyridinyl; or a pharmaceutically acceptable salt thereof are M.sub.1 receptor agonists useful in treatment of dementias involving the cholinergic system. dd

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **133783-88-7P 133783-89-8P 133784-14-2P**
133784-15-3P
(prepn. of, as muscarinic receptor agonist)
RN 133783-88-7 USPATFULL
CN Pyridazino[4,5-b]indolizin-1-amine, N-[(1-ethyl-2-pyrrolidinyl)methyl]-4-methyl- (9CI) (CA INDEX NAME)

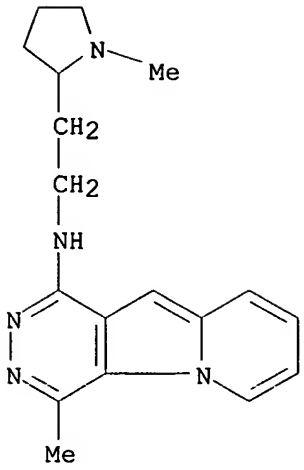


RN 133783-89-8 USPATFULL
CN Pyridazino[4,5-b]indolizin-1-amine, N-[(1-ethyl-2-pyrrolidinyl)methyl]-4-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

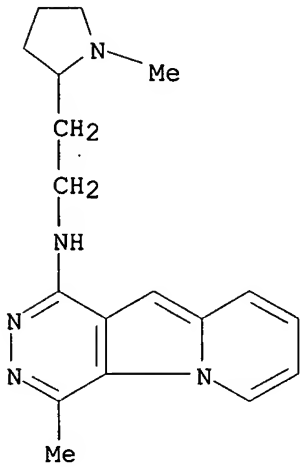


●2 HCl

RN 133784-14-2 USPATFULL
CN Pyridazino[4,5-b]indolizin-1-amine, 4-methyl-N-[2-(1-methyl-2-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)



RN 133784-15-3 USPATFULL
CN Pyridazino[4,5-b]indolizin-1-amine, 4-methyl-N-[2-(1-methyl-2-pyrrolidinyl)ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L100 ANSWER 17 OF 27 MEDLINE on STN DUPLICATE 6
ACCESSION NUMBER: 94076283 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8254613
TITLE: Synthesis, antiproliferative, and antiviral activity of 4-amino-1-(beta-D-ribofuranosyl)pyrrolo[2,3-d]pyridazin-7(6H)-one and related derivatives.
AUTHOR: Meade E A; Wotring L L; Drach J C; Townsend L B
CORPORATE SOURCE: Department of Medicinal Chemistry, College of Pharmacy, University of Michigan, Ann Arbor 48109-1065.
CONTRACT NUMBER: 2P30 CA 46592-05 (NCI)
NO1-AI-42554 (NIAID)

NO1-AI-72641 (NIAID)
SOURCE: Journal of medicinal chemistry, (1993 Nov 26) 36 (24) 3834-42.
Journal code: 9716531. ISSN: 0022-2623.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199401
ENTRY DATE: Entered STN: 19940203
Last Updated on STN: 19970203
Entered Medline: 19940111

ABSTRACT:
The synthesis of 4-amino-1-beta-D-ribofuranosylpyrrolo[2,3-d]pyridazin-7 (6H)-one (3) from the reaction of ethyl 3-cyano-1-beta-D-ribofuranosylpyrrole-2-carboxylate (10) and hydrazine is described. The 5:6 pyrrolo[2,3-d]pyridazin-7(6H)-one structure of 3 was established via a three-step conversion of 3 into 1-beta-D-ribofuranosylpyrrolo[2,3-d]pyridazin-4,7(5H,6H)- dio ne (14). 4-Amino-3-chloro-1-beta-D-ribofuranosylpyrrolo[2,3-d]pyridazin+ ++-7(6H)-one (16) 4-amino-3-bromo-1-beta-D-ribofuranosylpyrrolo[2,3-d]pyridazin++ +-7(6H)-one (18) were prepared via N-chlorosuccinimide or N-bromosuccinimide treatment of 4-amino-1-(2,3,5-tri-O-benzyl-beta- D-ribofuranosyl)pyrrolo[2,3-d]pyridazin-7(6H)-one (7) followed by a removal of the benzyl groups with boron trichloride. Direct treatment of 3 with N-iodosuccinimide furnished 4-amino-3-iodo-1-beta-D-ribofuranosylpyrrolo[2,3-d]pyridazin -7(6H)-one (19). The antiproliferative activity of the compounds was determined in L1210, H. Ep. 2 and several additional human tumor cell lines. In L1210 cells, the 3-halo-substituted compounds 16, 18, and 19 exhibited significant cytotoxicity (IC50 = 0.2, 0.1, 0.08 microM, respectively), in contrast to the 3-unsubstituted compound 3, which had only slight activity. The greater antiproliferative activity of 18 and 19 in contrast to 3 was confirmed in H. Ep. 2 cells and KB cells. The antiviral evaluation of these compounds revealed that compounds 16, 18, and 19 were active against human cytomegalovirus in both plaque- and yield-reduction assays. However, this activity was only partially separated from cytotoxicity in human cell lines.

CONTROLLED TERM: Check Tags: Human; Support, Non-U.S. Gov't; Support, U.S. Gov't, P.H.S.
Animals
*Antineoplastic Agents: CS, chemical synthesis
Antineoplastic Agents: PD, pharmacology
*Antiviral Agents: CS, chemical synthesis
Antiviral Agents: PD, pharmacology
Carcinoma, Squamous Cell: PA, pathology
Cell Division: DE, drug effects
Cytomegalovirus: DE, drug effects
Herpesvirus 1, Human: DE, drug effects
Leukemia L1210: PA, pathology
Magnetic Resonance Spectroscopy
Mice
Molecular Structure
*Ribonucleosides: CS, chemical synthesis
*Ribonucleosides: PD, pharmacology
Spectrum Analysis, Mass
Tumor Cells, Cultured

CAS REGISTRY NO.: **150885-25-9 (4-amino-1-ribofuranosylpyrrolo(2,3-d)pyridazin-7(6H)-one)**
CHEMICAL NAME: 0 (Antineoplastic Agents); 0 (Antiviral Agents); 0 (Ribonucleosides)

structures for hits from Medline, Drugit, & Basis printed at end of search

L100 ANSWER 18 OF 27 MEDLINE on STN DUPLICATE 8
ACCESSION NUMBER: 85199207 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2859858
TITLE: Metabolism and metabolic effects of 2-azahypoxanthine and

2-azaadenosine.
AUTHOR: Bennett L L Jr; Smithers D; Rose L M; Adamson D J; Shaddix S C; Thomas H J
SOURCE: Biochemical pharmacology, (1985 Apr 15) 34 (8) 1293-304.
Journal code: 0101032. ISSN: 0006-2952.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198506
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19950206
Entered Medline: 19850606

ABSTRACT:
The metabolism and metabolic effects of 2-azahypoxanthine and 2-azaadenosine were studied to elucidate the biochemical basis for their known cytotoxicities. 2-Azaadenosine is a known substrate for adenosine kinase. That 2-azahypoxanthine is a substrate for hypoxanthine (guanine) phosphoribosyltransferase is shown by the observations that, in cell-free fractions from HEp-2 cells supplemented with 5-phosphoribosyl-1-pyrophosphate, 2-azahypoxanthine inhibited the conversion of hypoxanthine to IMP but not the conversion of adenine to AMP, and hypoxanthine, but not adenine, inhibited the conversion of 2-azahypoxanthine to 2-azaIMP. [8-14C]2-Azahypoxanthine was synthesized from [8-14C]hypoxanthine via [2-14C]-4-amino-5-imidazolecarboxamide. In HEp-2 cells in culture, the principal metabolite of [8-14C]-2-azahypoxanthine was 2-azaATP; there was no detectable 14C in deoxynucleotides or in DNA or RNA fractions. 2-Azaadenosine was much more toxic than 2-azahypoxanthine, and, when used in the presence of an adenosine deaminase inhibitor, 2'-deoxycoformycin, was converted in HEp-2 cells to 2-azaATP in amounts that exceeded those of ATP in control cells. The pool of ATP was reduced by as much as 75% as 2-azaATP accumulated. In a short-term experiment (4 hr), 2-azaadenosine selectively reduced the pools of adenine nucleotides, whereas 2-azahypoxanthine reduced the pools of guanine nucleotides selectively. Both 2-azahypoxanthine and 2-azaadenosine inhibited the incorporation of formate into purine nucleotides and were without effect on the conversion of thymidine and uridine to nucleotides. 2-Azahypoxanthine inhibited the incorporation of thymidine into macro-molecules but not that of uridine or leucine; 2-azaadenosine inhibited the incorporation of all three of these precursors non-selectively. 2-AzaIMP inhibited IMP dehydrogenase competitively with IMP (Ki = 66 microM). The difference in effects of 2-azahypoxanthine and 2-azaadenosine perhaps may be due to the production, from 2-azahypoxanthine but not from 2-azaadenosine + 2'-deoxycoformycin, of 2-azaIMP, which inhibits synthesis of guanine nucleotides and thereby results in inhibition of DNA synthesis. Specific sites of action for 2-azaadenosine are yet undefined.

CONTROLLED TERM: Check Tags: Human; Support, Non-U.S. Gov't
*Adenosine: AA, analogs & derivatives
Adenosine: ME, metabolism
Adenosine: PD, pharmacology
Animals
*Antineoplastic Agents: ME, metabolism
Antineoplastic Agents: PD, pharmacology
Carcinoma, Squamous Cell
Cell Line
Chromatography, High Pressure Liquid
Deoxyribonucleotides: BI, biosynthesis
Hypoxanthine Phosphoribosyltransferase: ME, metabolism
*Hypoxanthines: ME, metabolism
Hypoxanthines: PD, pharmacology
IMP Dehydrogenase: AI, antagonists & inhibitors
Laryngeal Neoplasms
Leukemia L1210
Macromolecular Systems
Mice

Polynucleotides: BI, biosynthesis
Ribonucleotides: BI, biosynthesis
CAS REGISTRY NO.: **146-94-1 (2-azaadenosine)**; 4656-86-4 (2-azahypoxanthine); 58-61-7 (Adenosine)
CHEMICAL NAME: 0 (Antineoplastic Agents); 0 (Deoxyribonucleotides); 0 (Hypoxanthines); 0 (Macromolecular Systems); 0 (Polynucleotides); 0 (Ribonucleotides); EC 1.1.1.205 (IMP Dehydrogenase); EC 2.4.2.8 (Hypoxanthine Phosphoribosyltransferase)

L100 ANSWER 19 OF 27 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 9
ACCESSION NUMBER: 1979:146120 BIOSIS
DOCUMENT NUMBER: PREV197967026120; BA67:26120
TITLE: POLY NUCLEOTIDES PART 44 SYNTHESIS AND PROPERTIES OF POLY-2 AZA ADENYLIC-ACID AND POLY-2 AZA INOSINIC-ACID.
AUTHOR(S): FUKUI T [Reprint author]; KAKIUCHI N; IKEHARA M
CORPORATE SOURCE: FAC PHARM SCI, OSAKA UNIV, SUITA, OSAKA, JPN
SOURCE: Biochimica et Biophysica Acta, (1978) Vol. 520, No. 2, pp. 441-451.
CODEN: BBACAQ. ISSN: 0006-3002.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ABSTRACT:Chemically synthesized 2-azaadenosine 5'-diphosphate (n2ADP) and 2-azainosine 5'-diphosphate (n2IDP) were **polymerized** to yield poly(2-azaadenylic acid), poly(n2A) and poly(2-azainosinic acid), poly(n2I), using Escherichia coli polynucleotide phosphorylase. In neutral solution, poly(n2A) and poly(n2I) had hypochromicites of 32 and 5.5%, respectively. Poly(n2A) formed an ordered structure, which had a melting temperature (Tm) of 20.degree. C at 0.15 M salt concentration. Upon mixing with poly(U), poly(n2A) formed a 1:2 complex with Tm of 41.degree. C at 0.15 M salt concentration. Poly(n2A) and poly(n2I) formed 3-stranded complexes with poly(I) and poly(A), respectively. Poly(n2A).cntdot.2poly(I), poly(A).cntdot.2poly(n2I) and poly(n2A).cntdot.2poly(n2I) complexes had Tm values of 23, 48 and 31.degree. C at 0.15 M salt concentration, respectively. Poly(n2I) formed a double-stranded complex with poly(C), but its Tm was very low.
CONCEPT CODE: Biochemistry methods - Nucleic acids, purines and pyrimidines 10052
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
External effects - Temperature as a primary variable 10614
Enzymes - Methods 10804
Temperature - General measurement and methods 23001
Physiology and biochemistry of bacteria 31000
INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics
INDEX TERMS: Miscellaneous Descriptors
ESCHERICHIA-COLI POLY NUCLEOTIDE PHOSPHORYLASE
ORGANISM: Classifier
Enterobacteriaceae 06702
Super Taxa
Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Taxa Notes
Bacteria, Eubacteria, Microorganisms
REGISTRY NUMBER: 9035-74-9 (PHOSPHORYLASE)
65170-09-4 (POLY2-AZAINOSINIC ACID)
65170-12-9 (POLY2-AZAADENYLIC ACID)

Searched by Barb O'Bryen, STIC 571-272-2518

L100 ANSWER 20 OF 27 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1995:340327 BIOSIS
DOCUMENT NUMBER: PREV199598354627
TITLE: Preparation of oligonucleotides containing non-natural base analogues.
AUTHOR(S): Eritja, Ramon [Reprint author]; Acedo, Montse; Avino, Anna; Fabrega, Carme
CORPORATE SOURCE: Dep. Mol. Genetics, CID-CSIC, Jordi Girona 18-26, 08034 Barcelona, Spain
SOURCE: Nucleosides and Nucleotides, (1995) Vol. 14, No. 3-5, pp. 821-824.
CODEN: NUNUD5. ISSN: 0732-8311.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Aug 1995
Last Updated on STN: 13 Sep 1995
ABSTRACT:The preparation of a protected derivative of 2-aza-2'-deoxyinosine carrying a photolabile protecting group is described. The new derivative is useful to prepare oligonucleotides containing 2-azahypoxanthine. The synthesis of oligonucleotides containing 2-fluorohypoxanthine and O-4-alkylthymine is also described.
CONCEPT CODE: Biochemistry methods - Nucleic acids, purines and pyrimidines 10052
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biophysics - Methods and techniques 10504
Metabolism - Nucleic acids, purines and pyrimidines 13014
INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics; Metabolism
INDEX TERMS: Chemicals & Biochemicals
2-AZA-2'-DEOXYINOSINE; 2-AZAHYPOXANTHINE
INDEX TERMS: Miscellaneous Descriptors
2-AZA-2'-DEOXYINOSINE; 2-AZAHYPOXANTHINE
REGISTRY NUMBER: **56220-50-9** (2-AZA-2'-DEOXYINOSINE)
4656-86-4 (2-AZAHYPOXANTHINE)

L100 ANSWER 21 OF 27 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1991:450869 BIOSIS
DOCUMENT NUMBER: PREV199192095649; BA92:95649
TITLE: SYNTHESIS OF 5 AMINO-4-CYANO-1-IMIDAZOLYL-2-DEOXY-BETA-D-RIBOFURANOSIDE BY PHOTOLYSIS OF 2 AZA-2'-DEOXYADENOSINE OR GLYCOSYLATION.
AUTHOR(S): KAZIMIERCZUK Z [Reprint author]; SEELA F
CORPORATE SOURCE: LAB ORGANISCHE UND BIOORGANISCHE CHEM, FACHBEREICH BIOL/CHEM, UNIV OSNABRUCK, BARBARSTRASSE 7, D-4500 OSNABRUCK
SOURCE: Liebigs Annalen der Chemie, (1991) No. 7, pp. 695-698.
CODEN: LACHDL. ISSN: 0170-2041.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 11 Oct 1991
Last Updated on STN: 8 Jan 1992
ABSTRACT:The photolysis of 2-aza-2'-deoxyadenosine (1) results in the formation of a single reaction product. Its structure was assigned as 5-amino-4-cyano-1-imidazolyl 2-deoxyribofuranoside (2). The latter is also obtained independently from the glycosylation of the 5-amino-4-imidazolecarbonitrile (4) anion with the halogenase 5. The reaction is stereoselective but regioisomers are formed: the N-1 compound 6 in 21% and the N-3 regioisomer 7 in 45% yield. The structures of the regioisomeric imidazole nucleosides 2 and 3 have been assigned by 13C-NMR and 1H-NMR NOE difference spectroscopy.

CONCEPT CODE: Biochemistry methods - Nucleic acids, purines and pyrimidines 10052
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biophysics - Methods and techniques 10504
Biophysics - Molecular properties and macromolecules 10506
INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics
INDEX TERMS: Miscellaneous Descriptors
RIBONUCLEOTIDES MASS SPECTROSCOPY NMR
REGISTRY NUMBER: **34536-05-5** (2-AZA-2'-DEOXYADENOSINE)

L100 ANSWER 22 OF 27 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1988:387174 BIOSIS
DOCUMENT NUMBER: PREV198835061102; BR35:61102
TITLE: A NOVEL SYNTHESIS OF 4 AMINO-7-BETA-D-RIBOFURANOSYL IMIDAZO-4 5-D-TRIAZINE 2 AZAADENOSINE AND RELATED DERIVATIVES.
AUTHOR(S): KRAWCZYK S H [Reprint author]; TOWNSEND L B
CORPORATE SOURCE: DEP MEDICINAL CHEM, COLL PHARMACY, UNIV MICH, ANN ARBOR, MI 48109, USA
SOURCE: Abstracts of Papers Chemical Congress of North America, (1988) Vol. 3, No. 2, pp. MEDI 19.
Meeting Info.: THIRD CHEMICAL CONGRESS OF NORTH AMERICA HELD AT THE 195TH AMERICAN CHEMICAL SOCIETY MEETING, TORONTO, ONTARIO, CANADA, JUNE 5-10, 1988. ABSTR PAP CHEM CONGR NORTH AM.
DOCUMENT TYPE: Conference; (Meeting)
FILE SEGMENT: BR
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 23 Aug 1988
Last Updated on STN: 23 Aug 1988
CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520
Biochemistry methods - Nucleic acids, purines and pyrimidines 10052
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Pharmacology - General 22002
INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics; Pharmacology
INDEX TERMS: Miscellaneous Descriptors
ABSTRACT
REGISTRY NUMBER: **146-94-1** (2-AZAADENOSINE)

L100 ANSWER 23 OF 27 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1980:46820 BIOSIS
DOCUMENT NUMBER: PREV198018046820; BR18:46820
TITLE: CONFORMATIONAL COMPONENT OF STRUCTURE ACTIVITY RELATIONSHIPS IN NUCLEOSIDES.
AUTHOR(S): MILES D L [Reprint author]; MILES D W; EYRING H
CORPORATE SOURCE: DEP CHEM, UNIV UTAH, SALT LAKE CITY, UTAH 84112, USA
SOURCE: (1979) pp. P283-294. BAER, H. P. AND G. I. DRUMMOND (ED.). PHYSIOLOGICAL AND REGULATORY FUNCTIONS OF ADENOSINE AND ADENINE NUCLEOTIDES. XVII+438P. RAVEN PRESS: NEW YORK, N.Y., USA. ILLUS.
ISBN: 0-89004-305-1.
DOCUMENT TYPE: Book
FILE SEGMENT: BR
LANGUAGE: ENGLISH
CONCEPT CODE: Comparative biochemistry 10010
Biochemistry methods - Proteins, peptides and amino acids

10054
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Biophysics - Methods and techniques 10504
Biophysics - Molecular properties and macromolecules 10506
Biophysics - Membrane phenomena 10508
Biophysics - Bioenergetics: electron transport and oxidative phosphorylation 10510
Enzymes - Methods 10804
Enzymes - Chemical and physical 10806
Enzymes - Physiological studies 10808
Movement 12100
Metabolism - Energy and respiratory metabolism 13003
Metabolism - Proteins, peptides and amino acids 13012
Metabolism - Nucleic acids, purines and pyrimidines 13014

INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics; Bioenergetics (Biochemistry and Molecular Biophysics); Enzymology (Biochemistry and Molecular Biophysics); Metabolism

INDEX TERMS: Miscellaneous Descriptors
MEMBRANE TRANSPORT CYCLIC AMP 2 FLUORO ADENOSINE 2 AZA ADENOSINE 8 AZA ADENOSINE 8 AZA INOSINE 2 AZA INOSINE 7 DEAZA ADENOSINE 1 DEAZA ADENOSINE INOSINE GUANOSINE ADENYLATE CYCLASE IMP DEHYDROGENASE DEOXY CYTIDINE KINASE ADENOSINE KINASE PROTEIN KINASE II PURINE NUCLEOSIDE PHOSPHORYLASE 2 6 DI AMINO PURINE RIBO NUCLEOSIDE ENERGY

REGISTRY NUMBER: 60-92-4 (CYCLIC AMP)
146-78-1 (2-FLUOROADENOSINE)
146-94-1 (2-AZAADENOSINE)
10299-44-2 (8-AZAADENOSINE)
4968-68-7 (8-AZAINOSINE)
36519-16-1 (2-AZAINOSINE)
69-33-0 (7-DEAZAADENOSINE)
14432-09-8 (1-DEAZAADENOSINE)
58-63-9 (INOSINE)
118-00-3 (GUANOSINE)
9012-42-4 (ADENYLATE CYCLASE)
9028-93-7 (IMP DEHYDROGENASE)
9039-45-6 (DEOXYCYTIDINE KINASE)
9027-72-9 (ADENOSINE KINASE)
9026-43-1Q (PROTEIN KINASE)
80449-02-1Q (PROTEIN KINASE)
134549-83-0Q (PROTEIN KINASE)
372092-80-3Q (PROTEIN KINASE)
9030-21-1 (PURINE NUCLEOSIDE PHOSPHORYLASE)
2096-10-8 (2 6-DIAMINOPURINE RIBONUCLEOSIDE)

L100 ANSWER 24 OF 27 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
ACCESSION NUMBER: 1979:243198 BIOSIS
DOCUMENT NUMBER: PREV197968045702; BA68:45702
TITLE: 2 AZA ADENOSINE HEMI HYDRATE.
AUTHOR(S): SINGH P [Reprint author]; HODGSON D J
CORPORATE SOURCE: DEP CHEM, UNIV NC, CHAPEL HILL, NC 27514, USA
SOURCE: Acta Crystallographica Section B Structural Crystallography and Crystal Chemistry, (1979) Vol. 35, No. 4, pp. 973-976. CODEN: ACBCAR. ISSN: 0567-7408.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

ABSTRACT:Crystals of .**GRAPHIC**. are orthorhombic, C2221, a = 7.860 (9), b = 9.445 (10), c = 31.156 (26) .ANG., U = 2312.9 .ANG.3, Z = 8, Dc = 1.592, Dm (flotation in benzene/carbon tetrachloride) = 1.56 (1) Mg m-3. The nucleoside adopts the anti conformation with a torsion angle, .chi., of 13.8.degree.. There is approximate 85/15 disorder around the exocyclic bond C(4').sbd.C(5'), the major component exhibiting the gauche-gauche conformation while the minor component is gauche-trans.

CONCEPT CODE: Radiation biology - Radiation and isotope techniques 06504
Biochemistry methods - Nucleic acids, purines and pyrimidines 10052
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biophysics - Methods and techniques 10504
Biophysics - Molecular properties and macromolecules 10506

INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics

INDEX TERMS: Miscellaneous Descriptors
CRYSTAL STRUCTURE

REGISTRY NUMBER: **57762-23-9** (2-AZAADENOSINE HEMIHYDRATE)

L100 ANSWER 25 OF 27 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 1998-20660 DRUGU C
TITLE: The synthesis and biological activities of several 4-substituted imidazo[4,5-d]-1,2,3-triazines (2-azapurines).
AUTHOR: Migawa M T; Krawczyk S; Granskog K J; Drach J C; Townsend L B
CORPORATE SOURCE: Univ.Michigan
LOCATION: Ann Arbor, Mich., USA
SOURCE: Abstr.Pap.Am.Chem.Soc. (215 Meet., Pt. 1, MEDI 037, 1998)
CODEN: ACSRAL ISSN: 0065-7727
AVAIL. OF DOC.: Department of Chemistry, University of Michigan, Ann Arbor, Michigan 48109, USA.
LANGUAGE: English
DOCUMENT TYPE: Journal

ABSTRACT:

The synthesis of several novel 4-substituted-7-(beta-D-ribofuranosyl) imidazo[4,5-d]-1,2,3-triazines from 2-azazinosine is reported. The compounds were also used as intermediates in the synthesis of additional analogs. Some biological activities of these compounds were presented. (conference abstract).

SECTION HEADING: C Chemistry

CLASSIF. CODE: 71 Medicinal Chemistry
72 New Drugs

CONTROLLED TERM:
[01] AZAADENOSINE-2 *OC; AZAADENO2 *RN; SYNTH. *FT; CYTOSTATICS *FT; ANALOG *FT; NEW *FT; OC *FT

CAS REGISTRY NO.: **146-94-1**
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

L100 ANSWER 26 OF 27 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 59763 DRUGU
FILE SEGMENT: Registry
DERWENT DRUG REGISTRY NAME: AZAADENO2
DERWENT DRUG NAME: AZAADENOSINE-2
CAS REGISTRY NUMBER: **146-94-1**
CONTROLLED TERM: CYTOSTATICS
SUBSTRUCTURE TERM: TRIAZINE; IMIDAZOLE; COND.RING; NUCLEOSIDE;

HH-LINKED-CX; AMIDINE,CYCLIC; AMIDRAZONE

L100 ANSWER 27 OF 27 DRUGU COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 1992 DRUGU
FILE SEGMENT: Registry
DERWENT DRUG REGISTRY NAME: ATP-AZA-2
DERWENT DRUG NAME: ATP-AZA-2
CAS REGISTRY NUMBER: **95466-65-2**
SUBSTRUCTURE TERM: AMIDINE,CYCLIC; AMIDRAZONE; HH-LINKED-CX; NUCLEOTIDE; TRIAZINE; IMIDAZOLE; COND.RING

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FILE 'REGISTRY' ENTERED AT 14:45:03 ON 31 MAR 2004
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STRUCTURE FILE UPDATES:   30 MAR 2004  HIGHEST RN 669048-54-8
DICTIONARY FILE UPDATES:  30 MAR 2004  HIGHEST RN 669048-54-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> s  95466-65-2 or  146-94-1 or  57762-23-9 or  36519-16-1 or  34536-05-5 or  56220-50-9
or  65170-09-4 or  65170-12-9 or  150885-25-9

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             1 146-94-1
               (146-94-1/RN)
             1 57762-23-9
               (57762-23-9/RN)
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             1 34536-05-5
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             1 65170-12-9
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             1 150885-25-9
               (150885-25-9/RN)
L101         9 95466-65-2 OR  146-94-1 OR  57762-23-9 OR  36519-16-1 OR  34536-
               05-5 OR  56220-50-9 OR  65170-09-4 OR  65170-12-9 OR  150885-25-
               9

=> d ide 1-9; fil hom

L101 ANSWER 1 OF 9  REGISTRY  COPYRIGHT 2004 ACS on STN
RN   150885-25-9  REGISTRY
CN   7H-Pyrrolo[2,3-d]pyridazin-7-one, 4-amino-1,6-dihydro-1-.beta.-D-
     ribofuranosyl- (9CI)  (CA INDEX NAME)
FS   STEREOSEARCH
MF   C11 H14 N4 O5
SR   CA
LC   STN Files:   CA, CANCERLIT, CAPLUS, CHEMINFORMRX, MEDLINE, TOXCENTER

Absolute stereochemistry.
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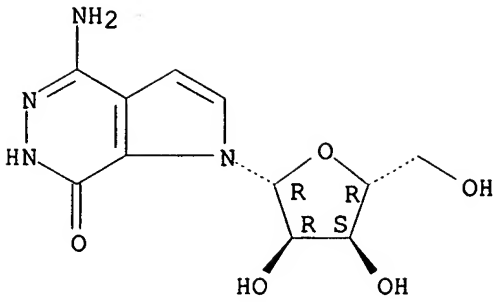
Structures for hits from Medline, Drugb, & Bios



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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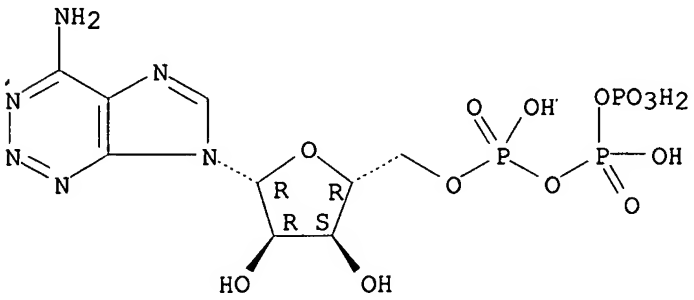
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L101 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN **95466-65-2** REGISTRY
CN 7H-Imidazo[4,5-d]-1,2,3-triazin-4-amine, 7-[5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-.beta.-D-ribofuranosyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 7H-Imidazo[4,5-d]-v-triazine, 4-amino-7-.beta.-D-ribofuranosyl-, 5'-triphosphate (7CI)
FS STEREOSEARCH
MF C9 H15 N6 O13 P3
LC STN Files: CA, CAOLD, CAPLUS, DDFU, DRUGU, TOXCENTER

Absolute stereochemistry.



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4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

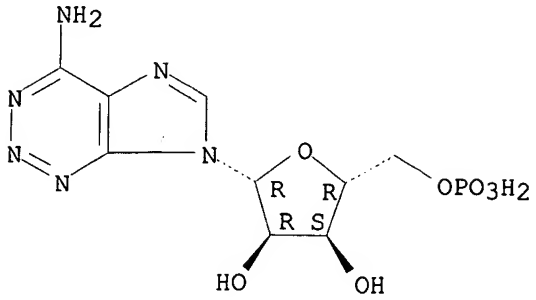
L101 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN **65170-12-9** REGISTRY
CN 7H-Imidazo[4,5-d]-1,2,3-triazin-4-amine, 7-(5-O-phosphono-.beta.-D-ribofuranosyl)-, homopolymer (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Poly(2-azaadenylic acid)
FS STEREOSEARCH
MF (C9 H13 N6 O7 P)x
CI PMS, COM
PCT Polynucleotide

LC STN Files: BIOSIS, CA, CAPLUS

CM 1

CRN 65170-11-8
CMF C9 H13 N6 O7 P

Absolute stereochemistry.



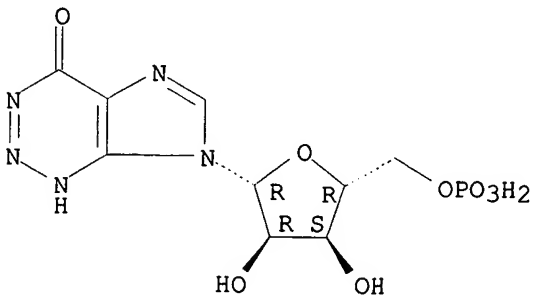
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L101 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN **65170-09-4** REGISTRY
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 1,7-dihydro-7-(5-O-phosphono-.beta.-D-ribofuranosyl)-, homopolymer (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Poly(2-azainosinic acid)
FS STEREOSEARCH
DR 68580-38-1
MF (C9 H12 N5 O8 P)x
CI PMS, COM
PCT Polynucleotide
LC STN Files: BIOSIS, CA, CAPLUS

CM 1

CRN 36519-18-3
CMF C9 H12 N5 O8 P

Absolute stereochemistry.

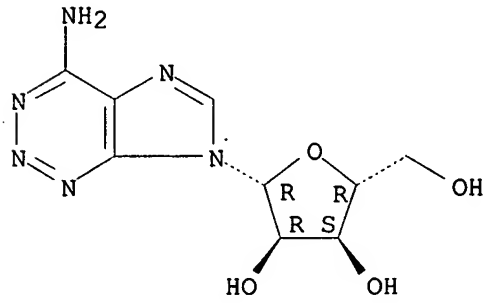


2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L101 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN **57762-23-9** REGISTRY

CN 7H-Imidazo[4,5-d]-1,2,3-triazin-4-amine, 7-.beta.-D-ribofuranosyl-, hydrate (2:1) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Azaadenosine hemihydrate
FS STEREOSEARCH
MF C9 H12 N6 O4 . 1/2 H2 O
LC STN Files: BIOSIS, CA, CAPLUS
CRN (146-94-1)

Absolute stereochemistry.

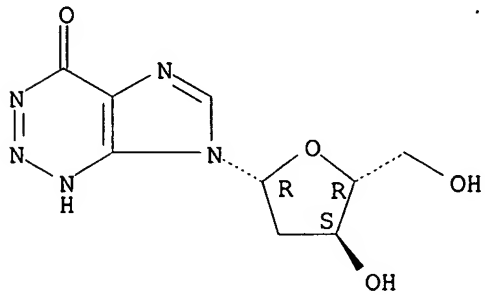


●1/2 H_2O

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L101 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN **56220-50-9** REGISTRY
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)-1,7-dihydro- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Aza-2'-deoxyinosine
CN NSC 163470
FS STEREOSEARCH
MF C9 H11 N5 O4
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



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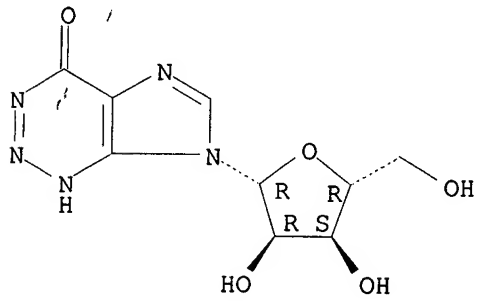
9 REFERENCES IN FILE CA (1907 TO DATE)
9 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L101 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN **36519-16-1** REGISTRY
CN 4H-Imidazo[4,5-d]-1,2,3-triazin-4-one, 1,7-dihydro-7-.beta.-D-ribofuranosyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Azainosine
CN NSC 158901
FS STEREOSEARCH
MF C9 H11 N5 O5
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.



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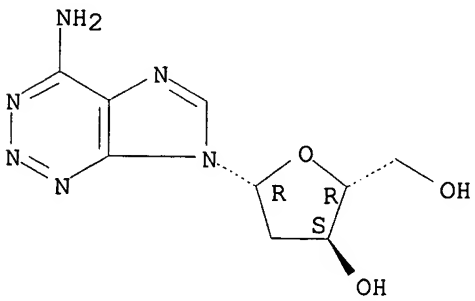
11 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L101 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN **34536-05-5** REGISTRY
CN 7H-Imidazo[4,5-d]-1,2,3-triazin-4-amine, 7-(2-deoxy-.beta.-D-erythro-pentofuranosyl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2'-Deoxy-2-azaadenosine
CN 2-Aza-2'-deoxyadenosine
CN NSC 134699
FS STEREOSEARCH
MF C9 H12 N6 O3
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CHEMINFORMRX, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.

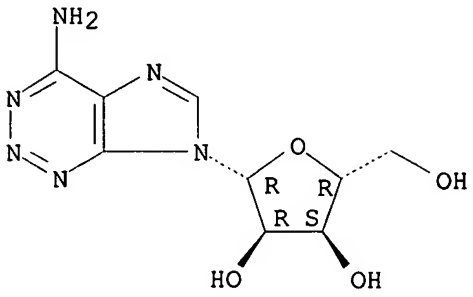


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11 REFERENCES IN FILE CA (1907 TO DATE)
11 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L101 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN **146-94-1** REGISTRY
CN 7H-Imidazo[4,5-d]-1,2,3-triazin-4-amine, 7-.beta.-D-ribofuranosyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 7H-Imidazo[4,5-d]-v-triazine, 4-amino-7-.beta.-D-ribofuranosyl- (7CI, 8CI)
OTHER NAMES:
CN 2-Azaadenosine
CN 4-Amino-7-.beta.-D-ribofuranosylimidazo[4,5-d]-v-triazine
CN NSC 125640
FS STEREOSEARCH
MF C9 H12 N6 O4
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, DDFU, DRUGU, MEDLINE, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.



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21 REFERENCES IN FILE CA (1907 TO DATE)
21 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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